

高等学校专业英语教材

电子商务专业英语教程

(第2版)

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内 容 简 介

本书旨在帮助读者掌握电子商务专业英语术语及用法,培养和提高读者阅读和翻译专业英语文献资料的能力。本书由16个主题单元组成,涵盖了电子商务领域的基本理论、基本知识、基本技术、基本应用和法规等内容。每个主题单元由主课文、副课文、阅读材料、词汇、注释和练习组成。书后附有参考译文、练习参考答案和参考文献。为了方便教学,本书另配有电子教案,可在华信教育资源网 www.hxedu.com.cn 免费下载。

本书可以作为电子商务、信息管理与信息系统、物流管理、市场营销等专业英语教材,也可供从事相关专业的工程技术人员参考使用。

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序

欣然应编者的邀请为本书作序。我一直认为电子商务是一个涉及多学科的专业,或者说这个行业需要的是复合型人才,需要既懂技术又懂管理和商务的人来从事它。同时,对于这个专业,掌握外语也是十分重要的。首先,从实际工作需求的视角来看,电子商务源于美国等西方国家,许多基础设施的技术和软件程序都是西方人开发的,要掌握和了解第一手资料,外语功底是不可或缺的。其次,从国际经济愈来愈全球化的趋势来看,掌握外语也是十分必要的。随着互联网、计算机和通信技术的发展,以及国际范围内一些经济和贸易制度的设计(包括 WTO 等),社会的分工不再局限于一国之内,而是世界范围内的分工。我们国家也提出要利用两种资源、两种市场,而要做到这两个“利用”,没有外语是不行的。最后,国家教育部一直都很重视双语教学,曾经专门引进了一批电子信息类国外教材影印出版发行,但国内学生在使用这些教材时存在两个困难,一是内容多、篇幅大,与国内的课时衔接不上;二是学生的专业词汇有限,阅读困难。因此,编写一本专门针对电子商务专业的外语教材是十分有益的。目前在这方面的主要问题是教材数量不多,质量差强人意,与国家提倡的双语教学的实际需求差距较大。所以,当编者向我征求本教材编写意见时,我表示赞同,在对具体的内容筛选上提出了自己的看法和要求。从我对初稿的审查来看,基本上实现了最初的设计目的。

本书有以下特点:

1. 比较全面地贯穿了电子商务各方面的内容。从经济到管理再到技术和商务,都有涉及,虽然篇幅所限,不可能展开,但对读者而言,能起到引导作用。
2. 基础知识和前沿研究相结合。在每个主题单元中,主课文(TEXT A)介绍的是电子商务的基本知识,副课文(TEXT B)是对主课文的补充或者是学术研究型的材料。补充阅读材料主要集中在网络营销方面的知识。
3. 课文材料实用新颖。书中所选择的材料大都是电子商务专业普遍涉及的内容,涵盖电子商务的主要技术分支。另外,注重选材新颖,比如美国商务部最新的电子商务报告等也被选取。
4. 书中对于专业术语都做了解释,免去读者查阅其他工具的不便。书后附有主课文译文和练习参考答案,便于教师的教学和学生的阅读。

电子商务无论作为一种专业,还是作为一个行业,在国际和国内发展得都很快,可以说日新月异,需要有不同专业特长的人来参与,欢迎有识之士来共同推动我国电子商务的发展,贡献自己的一份才智。衷心希望这本教材能与时俱进,不断地把电子商务所涉及的新技术、新知识介绍给广大读者。

国家教育部全国高等学校电子商务专业
教学指导委员会副主任
李 琪

前 言

始于 20 世纪末的电子商务,经过 21 世纪初的血与火的洗礼,涅槃重生,正以蓬勃姿态展示在世人的面前,气势如虹。铅华洗尽后的电子商务,如飞入寻常百姓家的“旧时王谢堂前燕”,渐行渐近,走入普通百姓的寻常巷陌,甚而至于在移动智能终端上购物已经稀松平常。据中国互联网信息中心(CNNIC)2014 年 12 月的调查:2014 年,中国网民的人均周上网时长达 26.1 小时。信任是应用的基础,2014 年有 54.5%的网民表示对互联网信任,相比 2007 年的 35.1%,网民对互联网的信任度有较大幅度提高。调查显示,60.0%的网民对于在互联网上分享行为持积极态度,53.1%的网民认为自身依赖互联网,其中非常依赖的占 12.5%,比较依赖的占 40.6%;购买过网络理财产品的网民规模达到 7849 万人;我国网络购物用户规模达到 3.61 亿人,使用网络购物的比例从 48.9%提升至 55.7%。网络购物市场呈现出普及化、全球化、移动化的发展趋势;跨境 B2C 业务的开启彰显中国网络零售全球化发展趋势,阿里数据显示,“双十一”期间,217 个国家和地区在阿里巴巴平台上进行交易;手机网购激发移动环境下的消费,引领网络购物发展,推动网络购物移动化发展趋势。新的电商模式不断涌现,如 B2B、B2C、C2C、O2O、团购、拍卖等,支付机制和信用机制都得到长足的发展,物流信息化日趋成熟,金融领域的新应用不断产生。信息时代,一个个极限在短时间内被突破,科技发展总是超过了我们的预期,正以不可思议的速度改变着人们的生活。产业经济正在快步进入“互联网+”时代,而日常生活也进入智能时代。

电子商务的发展为人们提供了机会,然而,机会总是青睐于有准备的人们。临渊羡鱼不如退而结网,只有那些掌握了电子商务所需知识的人,才能抓住它所带来的机遇。随着信息网络的发展,激烈的经济竞争日渐全球化。电子商务是全球化的商务活动,随着跨境电子商务的蓬勃发展,掌握技术知识固然重要,但掌握一门外语将使你如虎添翼。本书的编写宗旨就是要为这些有志于从事电子商务的青年打造一对这样的“翅膀”。本书既是一本电子商务英语书,也是一本英语的电子商务书。选择的内容均出自国外最近几年电子商务各个领域的最新教材、专著及电子商务相关网站提供的技术应用文章(详见参考文献)。章节的安排都尽量贴近电子商务专业入门知识的体系轮廓,但由于篇幅的限制,不得不有所删减。为了方便教学,本书另配有电子教案,向采纳本书作为教材的教师免费提供(获取方式:登录电子工业出版社华信教育资源网 www.hxedu.com.cn 或电话联系 010—88254531 获得)。

本书的第 1~7 单元由西安交通大学王晔、张慧芳编写,第 8、9 单元由西安外国语大学常青青编写,第 10、11 单元由西安外国语大学吕允丽副教授编写,第 12、13 单元由成都工业学院外语系李惠副教授编写,第 14~16 单元由美国得州 A&M 大学硕士王梦琳、王安迪编写。本书的出版得到了教育部电子商务教学指导委员会副主任、著名电子商务专家李琪教授的大力支持,也得到了中国信息经济学会电子商务专业委员会、西安交通大学“985”工程二期的支持。另外,西安交通大学的博士研究生朱雅玲、朱维敏为本书的出版做了不少工作,在此一并表示感谢。

由于水平所限,书中难免有疏漏和欠妥之处,请各位读者不吝赐教。反馈意见请发电子邮件至:dzswyy@126.com

编 者

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Unit 1 Electronic Commerce Theory

Text A Overview of Electronic Commerce

The term electronic commerce is heard frequently in corporate boardrooms, in management meetings, on the news, in newspapers (both hard copy and online), and on Capitol Hill. Electronic commerce is one of the most common business terms in use as we embark on the 21st century. So what exactly is electronic commerce and will the term still be important in the years to come, or will it be just another overused and discarded buzzword? In this text we will examine the definition of electronic commerce, categories and the impact on business models and value chain.

1. The definition

Different scholars define electronic commerce in different way. Marilyn Greentein and Todd M. Feinman define electronic commerce as: The use of electronic transmission mediums (telecommunications) to engage in the exchange, including buying and selling, of products and services requiring transportation, either physically or digitally, from location to location. They think electronic commerce is different from electronic business in that the former is restricting, however, and does not fully encompass the true nature of the many types of information exchanges occurring via telecommunication devices. Whereas, the term electronic business also includes the exchange of information not directly related to the actual buying and selling of goods. Increasingly, businesses are using electronic mechanisms to distribute information and provide customer support. These activities are not “commerce” activities; they are “business” activities. Thus, the term electronic business is broader and may eventually replace the term electronic commerce. Although the term electronic commerce is used throughout this text, many of the activities described are more accurately classified as electronic business.

Kalakota and Whinston (1997) define EC from these perspectives:

From a communications perspective, EC is the delivery of information, products/ services, or payments over telephone lines, computer networks, or any other electronic means.

From a business process perspective, EC is the application of technology toward the automation of business transactions and work flow.

From a service perspective, EC is a tool that addresses the desire of firms, consumers, and management to cut service costs while improving the quality of goods and increasing the speed of service delivery.

From an online perspective, EC provides the capability of buying and selling products and information on the Internet and other online services.

Lou Gerstner, IBM's CEO: "E-business is all about cycle time, speed, globalization, enhanced productivity, reaching new customers and sharing knowledge across institutions for competitive advantage."

Li Qi, a professor and expert in this field, defines EC from the perspective of productive force. He thinks there should be two definitions. The broader definition is that electronic commerce is the use of electronic tools in commercial activities. These electronic tools range from telegram, telephone of early times to NII, GII and INTERNET of modern times. The commercial activities here refer to all lawful activities of demand and consumption except for typical production process. The narrower definition is that electronic commerce is the whole process in which people, who master information technology and business regulations and rules, systematically use electronic tools and efficiently and low-costly engage in all kinds of activities centering on the exchange of commodities and services in a highly technically and economically advanced society. The first definition can be simplified as commercial electronic application, the second can be shortened as electronic commercial system.

EDI is a subset of electronic commerce. A primary difference between the two is that electronic commerce encompasses a broader commerce environment than EDI. Traditional EDI systems allow pre-established trading partners to electronically exchange business data. The vast majority of traditional EDI systems are centered around the purchasing function. These EDI systems are generally costly to implement. The high entry cost precluded many small and mid-sized businesses from engaging in EDI. Electronic commerce allows a marketplace to exist where buyers and sellers can "meet" and transact with one another.

2. Classification of the EC Field by the Nature of the Transactions

A common classification of EC is by the nature of transaction. The following types are distinguished:

Business-to-Business (B2B). Most of EC today is of this type. It includes the IOS transactions and electronic market transactions between organizations.

Business-to-Consumer (B2C). These are retailing transactions with individual shoppers. The typical shopper at Amazon. com is a consumer, or customer.

Consumer-to-Consumer (C2C). In this category consumer sells directly to consumers. Examples are individuals selling in classified ads (e.g., www.classified2000.com) and selling residential property, cars, and so on. Advertising personal services on the Internet and selling the knowledge and expertise is another example of C2C. Several auction sites allow individuals to put items up for auctions finally, many individuals are using intranets and other organizational internal networks to advertise items for sale or services.

Consumer-to-Business (C2B). This category includes individuals who sell products or services to organizations, as well as individuals who seek sellers, interact with them, and conclude a transaction.

Nonbusiness EC. An increased number of nonbusiness institutions such as academic institutions, not-for-profit organizations, religious organizations, social organizations, and government agencies are using various types of EC to reduce their expenses (e. g. , improve purchasing) or to improve their operations and customer service.

Intrabusiness (organizational) EC. In this category we include all internal organizational activities, usually performed on intranets, that involve exchange of goods services, or information. Activities can range from selling corporate products to employees to online training and cost-reduction activities.

Note that what we described as IOS is a part of B2B. Electronic markets, on the other hand, can be associated either with B2B or with B2C.

3. The impact on business models and the value chain

Electronic commerce is forcing businesses to rethink their traditional business models. Today's forward thinking CEO recognizes the challenge of eCommerce as a strategic business issue, not just one more technical issue to be delegated to the IS department, perhaps the existing EDI group. Although a company may have reengineered its internal business process and perhaps painfully installed an ERP system to bring inefficiencies to the back office, eCommerce is about reengineering outward-facing processes—industry process reengineering.

Thus, electronic commerce is not just a technology, it is a way of conducting business that has the potential to impact every aspect of the firm's value chain. Implementing full-scale, innovative applications of electronic commerce requires management teams to view the marketplace beyond the typical physical boundaries. Enix Consulting Limited thinks the biggest problem that electronic commerce pioneers encounter is the limited set of mental models that constrain our thinking. We tend to think of the web in our "industrial age" paradigm—here everything must be described and related to the physical world.

If electronic commerce applications are not placed in the proper business context and the strategy aligned with the business' overall business strategy, then the electronic commerce application is likely to fail. Thus, new business models are necessary that integrate electronic commerce initiatives with overall business goals.

The traditional view of the value chain is no longer rich enough to encompass the true relationships underlying the flows of information between a firm, its customers, and its suppliers. The traditional value chain typically depicts the information system data as flowing sequentially through the processes with inputs/outputs to the supplier at the back-end stage and to the customer at the front-end stage. In reality, firms engaging in electronic commerce may share information with their customers and suppliers at many

stages of the value chain. The firm's information system is the "glue" that links all phases of its processes together. This customer-oriented value chain enables the customer to access the firm's (the supplier's) information system at virtually every phase in order to assess the progress of the order. A customer may link to the firm's inventory data such as price, quantity, and availability, prior to entering into a sales contract. Further, the customer may be able to electronically receive design and product specifications prior to entering into a sales contract. The actual sales may be placed electronically and a promised or expected shipping date given by the supplier's information system to the customer. Once the order is placed, the customer may be able to check the status of the order/service placed.

The customers can also check the shipping status of orders placed with a supplier that have been completed and are in the shipping process. The customer's use of the supplier's information system to help provide better customer service after the sale is complete is another positive use.

The customer-oriented value chain also needs to link its procurement information systems to those of the firm's supplier. The supplier needs to access its supplier's information system in order to best serve its own customers. The supplier becomes the customer to its suppliers and should be able to interface its procurement systems with its suppliers' information systems to receive the same types of information that it provides to its own customers.

The Internet is enabling companies to fully integrate their supply chains, and this integration has a dramatic influence on the structure of participating companies to fully integrate their supply chains.

New Words

1. embark [im'ba:k] *v.* 上船, 上飞机, 着手, 从事, 装于船上, 登上
2. impact ['impækt] *n.* 碰撞, 冲击, 冲突, 影响, 效果
3. encompass [in'kʌmpəs] *v.* 包围, 环绕, 包含或包括某事物
4. via ['vaɪə, 'vi:ə] *prep.* 经, 通过, 经由
5. engage [in'geɪdʒ] *v.* 使忙碌, 雇佣, 使从事于, 使参加
6. subset ['sʌbset] *n.* [数]子集
7. preclude [pri'klu:d] *v.* 排除
8. residential [ˌrezi'denʃəl] *a.* 住宅的, 与居住有关的
9. implement ['implimənt] *v.* 贯彻, 实现, 执行
10. innovative ['ɪnəuveɪtɪv] *a.* 创新的, 革新(主义)的
11. encounter [in'kauntə] *v.* 遭遇, 遇到, 相遇
n. 遭遇, 遭遇战
12. constrain [kən'streɪn] *v.* 强迫, 抑制, 拘束
13. paradigm ['pærədaim, -dim] *n.* 范例

14. sequentially *adv.* 继续地, 从而
15. procurement [prə'kjuəmənt] *n.* 获得, 取得

Notes About Terms

1. Capitol Hill: 美国国会山。
2. NII(National Information Infrastructure): 国家信息基础设施(国家信息高速公路)。
3. GII(Global Information Infrastructure): 全球信息基础设施(全球信息高速公路)。
4. Business-to-Business (B2B): 企业对企业的电子商务。
5. Business-to-Consumer (B2C): 企业对个人的电子商务。
6. Consumer-to-Consumer (C2C): 消费者对消费者(个人对个人)的电子商务。
7. Consumer-to-Business (C2B): 企业对个人的电子商务。
8. Nonbusiness EC: 非商业性电子商务。
9. Intrabusiness (organizational)EC: 企业内部或组织内部电子商务。
10. Amazon: 亚马逊网站, 总部位于美国的一家著名电子商务网站, 最初只经营图书。

Exercises

I. Fill in the blanks according to the text.

Nowadays it seems everybody talks about E-Commerce, but 1 really knows how define it precisely. What is exactly E-Commerce? E-Commerce is doing 2 through electronic media or the practice of buying and selling products and services over the 3, utilizing technologies such as the Web, Electronic Data Interchange (or EDI for short), email, electronic fund transfers and smart cards, without 4 meeting between the two parties of the transaction. In brief, it is the online exchange or sale and 5 of goods and services. E-Commerce, in other words, refers to business transactions on the web 6 all it takes is a click of your mouse button and a 7 of your finger and you are on your way to 8 the proud owner of anything under the sun. E-Commerce is expected to boom 9 limits in near future, and it will 10 a major role in the way that small, medium and large companies conduct business either with their consumers, other businesses, or both.

II. Translate the following sentences into Chinese.

1. As human beings embark on the 21st century, some people think the electronic commerce will be just another overused and discarded buzzword.
2. Electronic commerce is different from electronic business in that the latter encompasses the true nature of the many types of information exchanges occurring via telecommunication devices.
3. Electronic commerce is not just a technology, it is a way of conducting business that has the potential to impact every aspect of the firm's value chain.
4. Electronic commerce allows a marketplace to exist where buyers and sellers can "meet" and transact with one another.

5. When the marketplace is electronic, the business center is not a physical building but rather a network-based location where business interaction occur.

III. Translate the following sentences into English.

1. 人类历史上的创新几乎没有哪一个比电子商务更具潜力。
2. 电子商务使得越来越多的人在家就可以工作,并且几乎不用走路就可购物。
3. 电子商务应用极为广泛,比如网上购物、购买股票、找工作、进行拍卖等。
4. 运用互联网,制造商能够直接与客户获得联系而不用通过中间人。
5. 电子商务通过电话、计算机网络或其他任何电子方式来传送信息,提供产品(或服务)及完成支付。

IV. Answer the following questions.

1. How many types of E-Commerce do you know? And what are they?
2. What benefits can be brought to business with E-Commerce?

Text B Advantages and Disadvantages of Electronic Commerce

1. Advantages of Electronic Commerce

Firms are interested in electronic commerce because, quite simply, it can help increase profits. All the advantages of electronic commerce for businesses can be summarized in one statement: Electronic commerce can increase sales and decrease costs. Advertising done well on the Web can get even a small firm's promotional message out to potential customers in every country in the world. A firm can use electronic commerce to reach small groups of customers that are geographically scattered. The Web is particularly useful in creating virtual communities that become ideal target markets for specific types of products or services. A virtual community is a gathering of people who share a common interest, but instead of this gathering occurring in the physical world, it takes place on the Internet.

Just as electronic commerce increases sales opportunities for the seller, it increases purchasing opportunities for the buyer. Businesses can use electronic commerce to identify new suppliers and business partners. Negotiating price and delivery terms is easier in electronic commerce because the Internet can help companies efficiently obtain competitive bid information. Electronic commerce increases the speed and accuracy with which businesses can exchange information, which reduces costs on both sides of transactions. Many companies are reducing their costs of handling sales inquiries, providing price quotes, and determining product availability by using electronic commerce in their sales support and order-taking processes.

Cisco Systems, a leading manufacturer of computer networking equipment, currently sells almost all its products online. Because no customer service representatives are involved in making these sales, Cisco operates very efficiently. In 1998, the first year in

which its online sales initiative was fully operational, Cisco made 72 percent of its sales on the Web. Cisco avoided handling 500,000 calls per month and saved \$500 million in that year alone. Today, Cisco conducts more than 99 percent of its purchase and sales transactions online.

Electronic commerce provides buyers with a wider range of choices than traditional commerce because buyers can consider many different products and services from a wider variety of sellers. This wide variety is available for consumers to evaluate 24 hours a day, every day. Some buyers prefer a great deal of information in deciding on a purchase; others prefer less. Electronic commerce provides buyers with an easy way to customize the level of detail in the information they obtain about a prospective purchase. Instead of waiting days for the mail to bring a catalog or product specification sheet, or even minutes for a fax transmission, buyers can have instant access to detailed information on the Web.

Some digital products, such as software, music and video files, or images, can even be delivered through the Internet, which reduces the time buyers must wait to begin enjoying their purchases. The ability to deliver digital products online is not just a cost-reduction opportunity. It can increase sales, too. Intuit sells its TurboTax income tax preparation software online and lets customers download the software immediately if they wish. Intuit sells a considerable amount of TurboTax software late in the evening on April 14th each year (April 15th is the deadline for filing personal income tax returns in the United States).

The benefits of electronic commerce extend to the general welfare of society. Electronic payments of tax refunds, public retirement, and welfare support cost less to issue and arrive securely and quickly when transmitted over the Internet. Furthermore, electronic payments can be easier to audit and monitor than payments made by check, providing protection against fraud and theft losses. To the extent that electronic commerce enables people to telecommute, everyone benefits from the reduction in commuter-caused traffic and pollution. Electronic commerce can also make products and services available in remote areas. For example, distance education is making it possible for people to learn skills and earn degrees no matter where they live or which hours they have available for study.

2. Disadvantages of Electronic Commerce

Some business processes may never lend themselves to electronic commerce. For example, perishable foods and high-cost, unique items, such as custom-designed jewelry, might be impossible to inspect adequately from a remote location, regardless of any technologies that might be devised in the future. Most of the disadvantages of electronic commerce today, however, stem from the newness and rapidly developing pace of the underlying technologies. These disadvantages will disappear as electronic commerce matures and becomes more available to and accepted by the general population.

Many products and services require that a critical mass of potential buyers be equipped and willing to buy through the Internet. For example, online grocers such as Peapod offer their delivery services only in a few cities. As more of Peapod's potential customers become connected to the Internet and begin to feel comfortable with purchasing online, the business might be able to expand into more geographic areas. But even the expansion of online grocery shopping is subject to limits; most online grocers focus their sales efforts on packaged goods and branded items. Perishable grocery products, such as fruit and vegetables, are much harder to sell online because customers want to examine and select specific items that are still fresh and appealing.

Peapod is a good example of how challenging it can be to build a business in an industry that requires this kind of critical mass. Although it was one of the first online grocery stores, Peapod has had a difficult time staying in business, and was even offline for a few weeks in mid-2000. Peapod was then acquired by a European firm that was willing to invest additional cash to keep it in operation. Two of Peapod's major competitors, WebVan and HomeGrocer, were unable to stay in business long enough to attract a sufficient customer base. Three of the most successful online grocery efforts in the world are Grocery Gateway in Toronto, Disco Virtual in Buenos Aires, and Tesco in the United Kingdom. Grocery Gateway and Disco Virtual operate in densely populated urban environments that offer sufficiently large numbers of customers within relatively small geographic areas, which make their delivery routes profitable. Tesco started its operations in London, which offers a similar densely populated urban area. However, Tesco has also expanded its operations to selected rural areas that are near a Tesco supermarket.

Established traditional grocery chains in the United States such as Albertsons and Safeway also now offer online ordering and delivery services in a second wave of using Internet technologies in the grocery business. By using their existing infrastructure (including warehouses, purchasing systems, and physical stores in multiple locations), they are able to avoid having to make the large capital investment in facilities that led to the demise of dot-corn grocers such as WebVan and HomeGrocer.

One online grocer that has successfully implemented an updated version of the WebVan and HomeGrocer operational approach is FreshDirect. By limiting its service area to the densely populated region in and around New York City, FreshDirect has found the right combination of operating scale and market. The company started in 2002 and achieved profitability in 2004 on sales of \$90 million. This is a much smaller sales volume than either WebVan or HomeGrocer would have needed to be profitable.

Businesses often calculate return on investment numbers before committing to any new technology. This has been difficult to do for investments in electronic commerce, because the costs and benefits have been hard to quantify. Costs, which are a function of technology, can change dramatically even during short-lived electronic commerce

implementation projects because the underlying technologies are changing so rapidly. Many firms have had trouble recruiting and retaining employees with the technological, design, and business process skills needed to create an effective electronic commerce presence.

Another problem facing firms that want to do business on the Internet is the difficulty of integrating existing databases and transaction-processing software designed for traditional commerce into the software that enables electronic commerce. Although a number of companies offer software design and consulting services that promise to tie existing systems into new online business systems, these services can be expensive.

In addition to technology and software issues, many businesses face cultural and legal obstacles to conducting electronic commerce. Some consumers are still fearful of sending their credit card numbers over the Internet and having online merchants-merchants they have never met-know so much about them. Other consumers are simply resistant to change and are uncomfortable viewing merchandise on a computer screen rather than in person. The legal environment in which electronic commerce is conducted is full of unclear and conflicting laws. In many cases, government regulators have not kept up with technologies. Laws that govern commerce were written when signed documents were a reasonable expectation in any business transaction. However, as more businesses and individuals find the benefits of electronic commerce to be compelling, many of these technology and culture-related disadvantages will be resolved or seem less problematic.

Reading Materials

IT Producing Industries—Hopeful Sighs in 2003

After two years of retrenchment, IT-producing industries now show signs of resuming the dynamic role they played during 1996—2000. Based on evidence through the third quarter of 2003, we estimate that, during 2003, IT-producing industries, which account for about 8 percent of U. S. GDP, contributed 0.8 percentage points of the estimated 2.9 percent rate of real U. S. economic growth.

Published data on recent spending for IT goods and services, and our estimates of IT production for 2002 and 2003 indicate: (1) while computer and semiconductor manufacturers have begun to rebound from major output losses suffered in 2001—2002, communications equipment makers show continued weakness; (2) IT service industries, which grew faster than IT manufacturing industries during 1996—2000, continued to grow during the economic slowdown of 2001—2002 though at a reduced rate, and contributed to the mildness of the recession; and (3), in 2003, IT producing industries became once again an important ingredient in an overall U. S. economic expansion.

The following sections examine: the growth and recomposition of output of IT industries; recent indicators of increasing demand for IT goods and services (i.e., investment patterns and manufacturers' shipments, new orders and inventories); IT industries' contributions to output growth; and IT industries' contribution to U.S. research and development spending.

IT Producing Industries Weather the Recession and Recover Slowly

On average, between 1996 and 2000, IT producing industries, which represented between 8 and 9 percent of the economy,⁴ supplied 1.4 percentage points of the Nation's 4.6 percent annual average real GDP growth.⁵ In 2001, IT-producing industries grew a scant 0.9 percent, though in a recession year that was still enough to account for practically all of the Nation's 0.3 percent economic growth. Overall, continued strength in IT producing industries, particularly communications services, helped to keep the recession comparatively mild.

In 2002, the U. S. economy gathered momentum, growing at over 2 percent. Unlike the 1996—2000 period, however, developments in IT producing industries were not a driving force. Losses in these industries, which had begun in 2001, accelerated in 2002; in the sector as a whole, revenues declined almost as rapidly in these two years as they had increased in the prior four. The poor showing was due largely to the slow recovery of

business spending for capital equipment. Unlike the investment-led expansion of 1996—2000, growth in 2002 was driven mainly by increases in personal consumption, changes in private inventories, and government spending. Almost none of the real growth of the U.S. economy in 2002 reflected output growth from the IT-producing industries.

Happily, the investment picture has begun to change. Recent evidence indicates that businesses are once again investing in IT capital equipment. However, the pattern of recovery in 2003 contrasts with experience in 1996—2000. In the goods producing sector, renewed strength is concentrated in computers and semiconductors; while shipments of communications equipment have continued to decline.

The services and software component of the IT-producing sector—which continued to grow during the economic slowdown of 2001 and the slowly developing recovery of 2002—continued to grow as well in 2003. But because IT service industries weathered the recession and its aftermath without sharply declining output, they are unlikely to rebound to the doubledigit growth rates achieved during 1997—2000 as the current recovery gains strength. (A possible exception is the communications services industry, which appeared to grow at about the same rate in 2003 as it did during 1997—2000.)

As a consequence of continued, if slower growth in IT service industries, and the period of negative growth in IT goods industries, the composition of IT-producing industry output has become significantly more concentrated in services. In 1996, IT software and computer services and communications services represented about 59 percent of the total output (nominal dollars) of IT-producing industries. We estimate that in 2003, the output share of software and IT services industries increased to 71 percent.

The shift toward services in the composition of IT output suggests that future growth in the IT sector may be more modest and less volatile than in the past. We estimate that, between 2001 and 2003, the output of the IT Software and Computer services sector, on average, increased by 1.3 percent per year. The IT Communications services sector increased, on average, 4.8 percent per year. In contrast, output growth in the IT Hardware and IT Communications equipment sectors fluctuated between double-digit declines and single-digit increases.

Our estimates of IT-producing industries' 2003 output are based on available first-, second-, and third-quarter data on demand for IT goods and services, and industry production indicators through the first nine months of the year. This section of the chapter and the one that follows look at available demand data and production indicators. A third section uses these data and indices to estimate the performance of IT producing industries for the year as a whole.

From Digital Economy 2003 of U.S. Department of Commerce.

Unit 2 Internet and Protocols

Text A Computer Networks

A computer network is any technology that allows people to connect computers to each other. Computer networks and the Internet, which connects computer networks around the world to each other, form the basic technology structure that underlies all electronic commerce.

Internet

Millions of people use the Internet every day, but only a small percentage of them really understand how it works. The Internet is a large system of interconnected computer networks that spans the globe. Using the Internet, you can communicate with other people throughout the world by means of electronic mail; read online versions of newspapers, magazines, academic journals, and books; join discussion groups on almost any conceivable topic; participate in games and simulations; and obtain free computer software. In recent years, the Internet has allowed commercial enterprises to connect with one another and with customers. Today, all kinds of businesses provide information about their products and services on the Internet. Many of these businesses use the Internet to market and sell their products and services.

The Internet is a strange phenomenon. It had its origins as a military project back in 1969. It was adopted by the research and academic community; became the tool (or toy) of computer nerds around the world and then, in the space of a couple of years, it became the engine that, it is claimed, is to propel the world into the information age and the twenty-first century.

The Internet is also an interesting phenomenon because nobody owns it. It is unlike the railway, telegraph or telephone companies of the past that were owned by large private corporations or state monopolies. It is a pattern of usage of information and communications technologies that transcends any and all telecommunications infrastructure providers.

The Internet is, at a technical level, defined not by the equipment but by its communications protocol, Transmission Control Protocol / Internet Protocol (TCP/IP).

The Internet is, at another level, defined by the people who use it. The individuals, institutions and companies that make information available, send messages, access web sites and, in the case of E-Commerce, buy and sell.

The Internet is not the only, or the first, national and international data network.

Other data networks have been put together by multinational organizations, EDI VADS providers and public access network companies such as CompuServe. The Internet has, however, despite its simple planning and lack of formal control, evolved into the global network; possibly its 'success' is because of that absence of formal controls.

The Development of the Internet

The origins of the Internet are commonly traced back to a US military project, the ARPANet, commissioned by the US Department of Defense in 1969. The aim of the project was to explore packet switching technology in order to establish a network with distributed control that could still function if some of its nodes and links were knocked out in a nuclear war. The ARPANet was demonstrated in late 1972 at an international conference in Washington DC: "the first public demonstration of packet switching."

In the late 1970's and early 1980's further experimental networks were created that were mainly used for E-mail within and between university departments. CSNet (Computer Science Network) was established in 1981 and the military aspects were split from the ARPANet in 1983. Further academic networks were put in place to provide access to supercomputer centers, notably JANET, Joint Academic Network in the UK (1984) and NSFNET (National Science Foundation in the US (1986)).

The TCP/IP protocol was established in 1982 and introduced for use on the ARPANet on the first of January 1983. Application protocols developed for and used in TCP/IP include the file transfer system (FTP), E-mail protocol (SMTP) and the remote login facility Telnet. The TCP/IP protocol also introduces the IP Address, a multipart numeric code used to identify all nodes in the network; TCP/IP addresses are also represented by an alphabetic equivalent in E-mail and web site addresses.

In 1989 a group of scientists at the European Laboratory for Particle Physics (CERN) in Geneva, Switzerland developed an Internet Tool that would link information produced by various CERN researchers. The tool provided a way to link textual information on different computers and created by different scientists. The object was to overcome issues of computer incompatibility and utilize a new way of linking called "hypertext". Rather than presenting information in a linear or hierarchical fashion, hypertext permits information to be linked in a web-like structure. Nodes of information can be linked to other nodes of information in multiple ways. As a result, users can dynamically criss-cross the information web using pieces in the order most convenient to them. Berners-Lee called his system of hyperlinked HTML documents the World Wide Web (WWW).

In 1993 the National Centre for Supercomputing Applications (NCSA) at the University of Illinois pushed the CERN idea further by creating a software tool called Mosaic. Mosaic is an easy-to-use, graphical user interface that permits text, graphics, sound and video to be hyperlinked. Mosaic was the first of the Internet tools that are now referred to as "web browsers".

An alternative information access facility, developed at about the same time as the web, was Gopher. This provided for a series of menus that give access to character files. Gopher was, for a time widely used in the US but has largely succumbed to the now near universal application of the web.

The first commercial web browser was Netscape. The Netscape Company was started in 1994 and included some of the programmers involved in the Mosaic Project. Some time after, some might argue rather late in the day, Bill Gates caught onto the Internet and Microsoft issued its Internet Explorer. With Netscape being the dominant web browser and Microsoft having a habit of wishing to dominate everything there ensued a period known as ‘the browser wars’. Microsoft used their dominance of the PC operating system market to get Explorer pre-loaded onto most new PCs -Netscape protested that this was anticompetitive -Microsoft insisted that an Internet interface was central to the design of their operating systems and a court case ensued. Netscape and Internet Explorer vied with each other to add features to their browser. The added features were not always compatible with other browsers or HTML standards and in the process making the job of designing a web page more difficult (the provider of a web page cannot guarantee which browser the customer will be using). On the plus side, from the users’ point of view, the browser is now free. Netscape and Explorer are distributed to thousands of potential users, by Internet service providers, on CDs through the post and both packages are downloadable via the web.

On the other side from the browser and the client computer, there is the software on the server system. As with the client, the server can be any one of several boxes; UNIX and (large) PCs being the most common choices. Internet server software is available from a number of suppliers with Netscape and Microsoft both prominent and Apache, a public domain product is also widely used on UNIX boxes and with the Linux operating system.

Aside from browser wars is the need to add logic and system interfaces to web applications. The commonly used approach has been a Common Gateway Interface (CGI) program using Perl (or another programming language offering similar facilities). More recently Java from Sun Microsystems and ActiveX products from Microsoft have been issued with the capability to perform the same functions.

In 1994 there were approximately 500 web sites. One year later this had increased to nearly 10,000 and any further statistics that could be included in this book would be out of date by the time it is read.

New Words

1. underlie [ˌʌndəˈlaɪ] *v.* 位于……之下, 成为……的基础
2. interconnect [ˌɪntə(ː)kəˈnekt] *v.* 使互相连接
3. simulation [ˌsɪmjʊˈleɪʃən] *n.* 仿真, 假装, 模拟
4. monopoly [məˈnɒpəli] *n.* 垄断, 垄断者, 专利权, 专利事业

5. infrastructure ['ɪnfɹə'strʌktʃə] *n.* 基础设施
6. transcend [træn'send] *v.* 超越, 胜过
7. incompatibility [ˌɪnkəm'pætə'bɪlɪtɪ] *n.* 不两立, 不相容
8. node [nəʊd] *n.* 节点
9. utilize ['juːtɪlaɪz] *v.* 利用
10. multiple ['mʌltɪpəl] *a.* 多样的, 多重的
n. 倍数, 若干
v. 成倍增加
11. dynamical [daɪ'næmɪkəl] *a.* 动力(学), 有力量的
12. succumb [sə'kʌm] *v.* 屈服, 屈从, 死
13. ensue [ɪn'sjuː] *v.* 跟着发生, 继起
14. anticompetitive [ˌæntɪkəm'petɪtɪv] *a.* 反竞争的
15. compatible [kəm'pætəbl] *a.* 协调的, 一致的, 兼容的
16. browser [ˌbraʊzə] *n.* 浏览器

Notes About Terms

1. EDI: *abbr.* Electronic Data Interchange 电子数据交换, 无纸贸易。
2. ARPAnet: ARPA 网 (Advanced Research Projects Agency Network), ARPA 计算机网 (美国国防部高级研究计划局建立的计算机网, 这个国际网允许其成员使用其设备并对大批不同的计算机存取数据)。
3. CSNET: *abbr.* [计] Computer Science NETwork, 计算机科学网络。
4. JANET: *abbr.* Joint Academic Network, 联合科研网。
5. TCP/IP: 用于网络的一组通信协议, 包括 TCP (Transmission Control Protocol) 和 IP (Internet Protocol)。
6. FTP: *abbr.* File Transfer Protocol, 文件传送[输]协议。
7. SMTP: *abbr.* Simple Message Transfer Protocol, 简单邮件传输协议, 用于电子邮件的传输。
8. CERN: *abbr.* European laboratory for particle physics, 欧洲粒子物理研究所。
9. Node: 网点; 节点。
10. Mosaic: 马赛克, 最早出现的 Internet 上的 Web 浏览器。
11. Gopher: 基于菜单驱动的 Internet 信息查询工具。
12. Hypertext: 超文本, 含有指向其他文本文件链接的文本。
13. CDS: Central Dynamic Store 中央动态存储器。
14. Browser: 浏览器(Browser)就是指在我们使用的计算机中安装的, 用来显示指定文件的程序。
15. ActiveX: 微软倡导的 ActiveX 网络化多媒体对象技术。
16. VADS: *abbr.* Value-added data service 加值型资讯服务。
17. CompuServe: 在美国成功运作的加值网络(VAN)。
18. NCSA: *abbr.* National Centre for Supercomputing Application 国家计算安全中心。

19. CGI; *abbr.* Common Gateway Interface 连接主页和应用程序的接口。
20. Computer network: 计算机网络。
21. World Wide Web (WWW): 环球网(万维网)。
22. NSFNET; *abbr.* National Science Foundation NETwork 美国国家科学基金会网, 是美国的一个广域网络之主干线 (backbone), 它是属于民间的网络组织。
23. Packet Switching: 包交换。
24. supercomputer: [计] 超级计算机。
25. HTML; *abbr.* Hypertext Markup Language, 超文本置标语言。
26. Linux: 一种可免费使用的 UNIX 操作系统, 运行于一般的 PC 机中。

Notes About Sentences

1. It was adopted by the research and academic community; became the tool (or toy) of computer nets around the world and then, in the space of a couple of years, it became the engine that, it is claimed, is to propel the world into the information age and the twenty-first century.

因特网被用于研究和学术领域;成为全球计算机网络的工具(或玩具),并且在几年的时间里,它被认为是全球进入信息时代和 21 世纪的推动力。

2. The Internet has, however, despite its simple planning and lack of formal control, evolved into the global network; possibly its 'success' is because of that absence of formal controls.

尽管规划简单,缺乏正式的控制,然而,因特网却进化成全球性的网络;也许它的成功正是由于这种正式控制的缺乏。

3. Microsoft used their dominance of the PC operating system market to get Explorer pre-loaded onto most new PCs—Netscape protested that this was anticompetitive—Microsoft insisted that an Internet interface was central to the design of their operating systems and a court case ensued.

本句应该译为:“微软利用其在个人计算机操作系统市场的主导地位,使得 Explorer 浏览器软件提前装入大多数新计算机中,Netscape 表示抗议,认为这种行为是违背竞争规则的。微软坚持说因特网界面是其操作系统程序设计的核心,随即诉诸法院。”“—Netscape protested that this was anticompetitive—”作本句的补充成分。

Exercises

I. Fill in the blanks according to the text.

The Internet is used by millions of people everyday, so it is very useful and important to know something about the Internet. The Internet is a large system of 1 that spans the globe. It is, at a 2 level, defined not by the equipment but by its 3, that is, 4. At another level, the Internet is defined by the people who use it. Application protocols developed for and used in TCP/IP include the 5, 6, and 7.

TCP\IP protocol also introduces the _____ 8 _____, a multipart numeric code used to identify all nodes in the network. An important Internet tool provides a way to link textual information on different computers and it is developed to overcome issues of _____ 9 _____ and utilize a new way of linking called _____ 10 _____.

II . Translate the following sentences into Chinese.

1. In recent years, the Internet has allowed commercial enterprises to connect with one another and with customers.
2. It is a pattern of usage of information communications technologies that transcends any and all telecommunications infrastructure providers.
3. The Internet has, however, despite its simple planning and lack of formal control, evolved into the global network; possibly its 'success' is because of that absence of formal controls.
4. Rather than presenting information in a linear or hierarchical fashion, hypertext permits information to be linked in a web-like structure.
5. The added features were not always compatible with other browsers or HTML standards and in the process making the job of designing a web page more difficult (the provider of a web page cannot guarantee which browser the customer will be using).

III . Translate the following sentences into English.

1. 互联网是起源于美国的军事工程项目,现在已是连通全世界的一个超级计算机互联网。
2. TCP/IP 包含很多协议,其中最重要的两个协议是传输控制协议和网际协议。
3. 传输控制协议负责把数据分成若干个数据包,并给每个数据包加上一个包头,上面写上数据包的编号。
4. 互联网不为某个个人或组织所拥有和控制,人人都可以参与到其中。
5. 互联网是一个计算机网络,凡是采用 TCP/IP 协议并且能够与互联网中的任何一台主机进行通信的计算机,都可以看成互联网的一部分。

IV. Answer the following questions.

1. According to your understanding, please explain what the Internet is, and how it can be defined.
2. Briefly illustrate the general development of the Internet in your own words.

Text B The TCP/IP Protocol Suite

The network protocol used on the Internet is Transmission Control Protocol / Internet Protocol-TCP/IP. Based on protocol research and development conducted on its experimental packet-switched network, ARPAnet, the U. S. Department of Defense (DOD) has, issued a set of military standards for computer-communications protocols. Although there are five of these protocols, the entire set is known by the names of two of them; transmission-control protocol (TCP) and Internet protocol (IP). These protocols are in widespread use within the U.S. defense community. But what is more interesting is

that they have steadily built up a following in the commercial arena during a time when much attention has been focused on the international standards based on the open systems interconnection (OSI) model. There are hundreds of vendors that provide TCP/IP products, and these are the most widely available and most widely used set of standardized computer-communications protocols.

TCP/IP is a packet switching protocol. In packet switching, messages are split up into segments (packets) and dispatched into the network with their source and destination addresses plus other header information including a package sequence number. The route a packet takes through the network is determined within the network and the lines used are shared with other packets that are traveling through the network (this contrasts with a circuit switched network where the line is used for just one transmission at any time). The packets are reassembled into the message in the destination system. TCP provides the transport protocol and ensures that the data that is sent is complete and error free when it is received at the destination. IP provides the routing mechanism. IP addresses consist of four sets of decimal numbers separated by full stops, e. g. 192. 9. 1. 20. The IP address specifies both the sending network (netid) and the destination computer (hostid)-vital given the Internet's structure as a network of networks and the dynamic nature of the Internet. The IP address is used in conjunction with the port number, a logical number that specifies the application, e. g. 80 for the World Wide Web.

The architecture of TCP/IP protocol suite, like OSI model, is layered. In the case of TCP/IP, five layers are involved. The reference model for network protocols is the OSI seven layer model and the five layers of TCP/IP are commonly explained with reference to that OSI model. The five layers of TCP/IP are:

- **Application Layer**

Equivalent to the OSI Model layers 7, 6 and (part of) 5.

The application is the program that initiates the transfer. This may be the user's own program/application package or one of the TCP/IP defined applications:

- **FTP** File Transfer Protocol;
Used to copy files across the network.
- **SMTP** Simple Mail Transfer Protocol;
Used for all Internet E-mail.
- **Telnet** Remote login facility.

The message generated at the application layer, together with the IP address and port number, are passed to the transport layer for further processing. If the application does not have the full IP address then the DNS (Domain Name System) / WINS (Windows Internet Name System) can be invoked to provide it.

- **Transport Layer**

Equivalent to the OSI Model layer 4 (and part of 5).

At this level, TCP establishes a logical connection with the receiving computer and

determines the size of the segments to be sent. TCP then divides up the message into segments and attaches a header to each; the header specifies the source and destination ports and the sequence number of the segment within the message.

UDP is an alternative to TCP that is used for real-time audio or video. UDP provides no error detection; there is little virtue in re-transmission of errored segments in such real-time applications. For both protocols the segments are passed to the network layer, together with the IP address.

- **Network Layer**

Equivalent to the OSI Model layer 3.

The Network Layer is responsible for routing the packet from source station to its final destination station, specified by the MAC address. If the MAC address is not already available then an ARP (Address Resolution Protocol) request is broadcast to the network and the machine with that IP address responds with its MAC address.

The Network Layer may fragment the segments from the Transport Layer into smaller packets if this is necessary, to fit the frame size.

The output packets from this layer (referred to as datagrams) are passed to the datalink layer.

- **Datalink Layer**

Equivalent to the OSI Model layer 2.

At the datalink layer, IP interfaces with the network to be used, e. g. Ethernet, or X25. The network protocol will typically add its' own header (Nh) and trailer (Nt) that incorporate the MAC address.

The packet is then passed onto the medium, the physical network layer.

- **Physical Layer**

Equivalent to the OSI Model layer 1.

The cables used for transmission.

At the time of its introduction, TCP/IP was seen as an interim measure with the OSI (Open System Interconnection) standard intended as an eventual replacement. In the event the use of TCP/IP has continued and interest in the OSI standard has waned. The OSI standards are still used in a number of commercial networks but the omnipresence of the Internet is tending to make TCP/IP the de facto standard for wide-area networking.

Let us trace a simple operation. Suppose that a process, associated with port 1 at host A, wishes to send a message to another process, associated with port 2 at host B. The process at A hands the message down to TCP with instructions to send it to host B, port 2. TCP hands the message down to IP with instructions to send it to host B. Note that IP need not be told the identity of the destination port. All it needs to know is that the data are intended for host B. Next, IP hands the message down to the network-access layer (e.g., Ethernet logic) with instructions to send it to router X (the first hop on the way to B).

To control this operation, control information as well as user data must be transmitted, as suggested in Figure 7. 3. Let us say that the sending process generates a block of data and passes this to TCP. TCP may break this block into smaller pieces to make it more manageable. To each of these pieces, TCP appends control information known as the TCP header (TCPH), forming a TCP segment. The control information is to be used by the peer TCP-protocol entity at host B. The following are examples of items that are included in this header:

- **Destination port:** When the TCP entity at B receives the segment, it must know to which port the data are to be delivered.
- **Sequence number:** TCP sequentially numbers the segments that it sends to a particular destination port, so that if they arrive out of order, the TCP entity at B can reorder them.
- **Checksum:** The sending TCP includes a code that is a function of the contents of the remainder of the segment. The receiving TCP performs the same calculation and compares the result with the incoming code. A discrepancy results if there has been some error in transmission.

Next, TCP hands each segment over to IP, with instructions to transmit it to B. These segments must be transmitted across one or more subnetworks and relayed through one or more intermediate routers. This operation, too, requires the use of control information. Thus, IP appends header of control information to each segment to form an IP datagram. An example of an item stored in the IP header is the destination host address (in this example, B).

Finally, each IP datagram is presented to the network-access layer for transmission across the rust subnetwork in its journey to the destination. The network-access layer appends its own header, creating a packet, or frame. The packet is then transmitted across subnetwork 1 to router X. The packet header contains the information that the subnetwork needs to transfer the data across the subnetwork. Examples of items that may be contained in this header include:

- **Destination subnetwork address:** The subnetwork must know to which attached device the packet is to be delivered.
- **Facilities requests:** The network-access protocol might request the use of certain subnetwork facilities, such as priority.

As router X, the packet header is stripped off and the IP header examined. On the basis of the destination-address information in the IP header, the IP module in the router directs the datagram out across subnetwork 2 to B. To do this, the datagram is again augmented with a network accessheader.

When the data are received at B, the reverse process occurs. At each layer, the corresponding header is removed, and the remainder is passed on to the next higher layer, until the original user data are delivered to the destination process.

Reading Materials

A Nation Online: How Americans Are Expanding Their Use of the Internet

Few technologies have spread as quickly, or become so widely used, as computers and the Internet. These information technologies are rapidly becoming common fixtures of modern social and economic life, opening opportunities and new avenues for many Americans. A Nation Online: How Americans Are Expanding Their Use of the Internet shows the rapidly growing use of new information technologies across all demographic groups and geographic regions. Not only are many more Americans using the Internet and computers at home, they are also using them at work, school, and other locations for an expanding variety of purposes.

In the last few years, Americans' use of the Internet and computers has grown substantially.

- The rate of growth of Internet use in the United States is currently two million new Internet users per month.
- More than half of the nation is now online. In September 2001, 143 million Americans (about 54 percent of the population) were using the Internet—an increase of 26 million in 13 months. In September 2001, 174 million people (or 66 percent of the population) in the United States used computers.

Children and teenagers use computers and the Internet more than any other age group.

- Ninety percent of children between the ages of 5 and 17 (or 48 million) now use computers.
- Seventy-five percent of 14-17 years old and 65 percent of 10-13 years old use the Internet.
- Family households with children under the age of 18 are more likely to access the Internet (62 percent) than family households with no children (53 percent), and non-family households (35 percent).
- Computers at schools substantially narrow the gap in computer usage rates for children from high and low income families.

Internet use is increasing for people regardless of income, education, age, races, ethnicity, or gender.

- Between December 1998 and September 2001, Internet use by individuals in the lowest-income households (those earning less than \$15,000 per year) increased at

a 25 percent annual growth rate. Internet use among individuals in the highest-income households (those earning \$75,000 per year or more) increased from a higher base but at a much slower 11 percent annual growth rate.

- Between August 2000 and September 2001, Internet use among Blacks and Hispanics increased at annual rates of 33 and 30 percent, respectively. Whites and Asian American and Pacific Islanders experienced annual growth rates of approximately 20 percent during these same periods.
- Over the 1998 to 2001 period, growth in Internet use among people living in rural households has been at an average annual rate of 24 percent, and the percentage of Internet users in rural areas (53 percent) is now almost even with the national average (54 percent).
- The highest growth rate among different types of households is for single mothers with children (29 percent).
- People with mental or physical disabilities (such as blindness, deafness, or difficulty walking, typing, or leaving home) are less likely than those without such disabilities to use computers or the Internet.

While 80 percent of Americans access the Internet through dial-up service, residential use of broadband service is rapidly expanding.

- Between August 2000 and September 2001, residential use of high-speed, broadband service doubled—from about 5 to 11 percent of all individuals, and from 11 to 20 percent of Internet users.

Americans are going online to conduct an expanding range of activities.

- Forty-five percent of the population now uses E-mail, up from 35 percent in 2000. Approximately one-third of Americans use the Internet to search for product and service information (36 percent, up from 26 percent in 2000).
- Among Internet users, 39 percent of individuals are making online purchases and 35 percent of individuals are searching for health information.

Use of the Internet and computers at work has contributed to higher use levels at home.

- The presence of someone who uses a computer or the Internet at work in a household is associated with substantially higher computer ownership or Internet use for that household, by a margin of about 77 percent to 35 percent.

With more than half of all Americans using computers and the Internet, we are truly a nation online. At work, schools, and libraries, as well as at home, the Internet is being used by a greater number of Americans.

From U. S. DEPARTMENT OF COMMERCE

Unit 3 Economics of Electronic Commerce

Text A Interaction of Economics and E-Commerce

Electronic commerce, or e-commerce, is defined as the act of doing business electronically over the Internet. The two key distinguishing features of this e-commerce definition are first, the phrase “over the Internet”. The Internet is an electronic entity that links individual networks of computers together. Therefore, by limiting the definition of e-commerce to transactions over the Internet, the scope of activity is a bit narrower than might be found in other studies. For example, an automatic teller machine (ATM) allows users to conduct financial transactions electronically (withdraw funds, make deposits, shift balances) by means of an ATM network. Because the ATM transactions do not take place over the Internet, however, they are excluded from the definition. Conversely if a consumer accesses a bank account using a Web browser on a computer and performs the same functions, this is e-commerce. By the same logic, using an electronic retail credit or debit card to purchase goods at a gas station or a local merchant would be excluded as well, but it would be e-commerce if the same consumer paid by credit card for an airline or hotel reservation over the Internet at a travel site such as Orbitz.com.

The World Wide Web is the most popular and common application for making use of the Internet technology. It provides a way to access e-commerce sites quickly with a minimal demand for technical skill on the part of the user. The Web allows for color, graphics, animation, and sound, all of which make the e-commerce event a more entertaining and potentially informative experience.

The second distinguishing feature of the e-commerce definition involves the interpretation of the phrase “doing business”. This phrase has traditionally been associated with the acts of buying and selling a product or service. However, supplying Internet-based information, free of charge, might also be considered as part of “doing business” through e-commerce. This interpretation would hold if the information supplier acted with the intent of making a current or future profit on the transaction by, for example, hosting paid advertising on the site or by linking the free service to a fee-based one. Yahoo.com provides free search information and a number of free services, including E-mail accounts, with the hope of attracting viewers to support banner advertising and possibly to access some of its fee-based services.

The Internet first came to life in 1969, and originally served as a vehicle for transmitting mostly scientific information among university and government computer networks. The introduction of the Internet as a vehicle for e-commerce dates back only to

the early 1990s. Conversely, economics as a social science first appears in 1776, according to conventional wisdom, with roots that reach back in antiquity to the time of the Greeks and Romans. Economic analysis starts from the reality of scarcity. It is based upon the fact that the physical resources, which supply goods and services to fulfill human wants, are limited relative to those wants. Therefore, life is always about material choices in terms of what and how to produce, how much should be produced and who should get what share. Every act of using scarce resources has an economic cost, called an opportunity cost. Opportunity cost reflects the cost of using scarce resources in the current use and is measured in terms of the value of the best alternative forgone or what must be given up.

E-Commerce in Economic Terms

If resources are relatively scarce, what is the best way to use them as efficiently as possible? Economics postulates that unhindered, competitive markets are the most efficient resource users. Competitive markets respond to the signals sent by product prices, resource costs, and firm profits or losses to offer the best, but not perfect, solution to getting the greatest value from the resources at the lowest possible cost. These key economic concepts of markets, competition, price signals, and efficiency help to identify and organize the topics of this book as economic analysis is applied to the phenomenon of e-commerce. First, the Internet provides the technology to construct an electronic market, or virtual market, where goods and services can be exchanged. Second, the e-market contains e-firms that compete with each other electronically and with the brick-and-mortar firms that are part of the physical market. Third, the e-firms deal with prices, costs, profits, and losses just as the physical firms do. Fourth, structural characteristics of e-market affect the e-firm's competitive behavior. And last. Business plans or strategies of e-firms affect their survival and growth.

A sampling of questions arising from this marriage of economics and e-commerce issues would include the following:

- What is (are) the structure(s) of an electronic market(s)?
- Do the number and size of the e-firms in a given market make a difference in terms of how resources are used? If so, how?
- What barriers to entry and exit might new firms encounter? Are these barriers technical or strategic?
- How do e-firms price their product?
- How do e-firms differentiate their products and add sufficient value to create loyalty?
- How do the e-firms interact with one another and with physical firms?
- How do e-firms react to the competitive initiatives of their rivals?
- How efficient are e-firms in controlling costs and using resources?
- Are e-firms able to generate a profit?
- Are e-firm profits sufficient to reward those who took the risks and invested in the

start-up of the e-firm?

- Will the e-firms be able to grow over time, anticipate gaps or changes in the market, and adopt new technology?

In working to answer these and other questions about the economics of e-commerce and the Internet, it is important to keep two qualifiers in mind. First, one goal is to identify and apply a general set of economic principles for analyzing e-commerce activity. Keep in mind that the text examines the behavior of individual and diverse e-commerce firms operating in different e-commerce industries and markets. It may be that market structure behavior, and efficiency difference in some key ways among B2B as opposed to B2C firms or industries. Even within B2C, the economics of selling books might differ in some important ways from the model constructed to sell cars consumer electronics or travel. Therefore, what may be acquired is a tool kit of economic concepts that can be drawn upon and applied judgmentally to help understand the operation of and anticipate the future for a particular e-commerce firm or industry.

Second, economics has evolved a body of theory called microeconomics. This branch of economics looks at the behavior of individual units, including firms and consumers as they deal with the scarcity problem. In terms of e-firm behavior, just how different is ecommerce from other types of economic activity? Although it may trigger revolution in the way business is done, the competitive actions of e-commerce and the tool lot to analyze them may not be unique, but rather just part of traditional microeconomics.

Together, the Internet and Web Based E-commerce are changing both individual consumer behavior and the ways in which firms do business. They erase distance and time as barriers in the exchange process. They empower consumers by reducing search costs and tilting the information gathering process more favor of the buyer. The ready availability of information and the demise of distance also influence the balance between competition through product differentiation and competition through price. Together, they work to turn differentiated products into commodities, which can lead to lower prices that benefit consumers.

The Internet is the latest step in the long history of communications revolutions. However, e-commerce is less of a revolution that transforms markets, and more of an revolutionary force that provide an added distribution channel that extends the range of transaction options. The data shows that the volume of e-commerce business being done via Internet is large and growing. Therefore, while many of the original dot-com firms have died as quickly as they were born, other haves survived and began to make profits. For that reason it is not surprising to see a number of new e-firms rising up to take the place of their fallen predecessors. Both the Internet and e-commerce are here to stay.

The tools and rigor of economic analysis provide a useful approach to examining the nature, behavior, and consequences of e-commerce and the Internet. Competitive market standards, the formation of and reaction to price signals, strategic behavior, and notions

of efficiency in the use of scarce resources are all valuable economic concepts that work to explain electronic exchange. These tools help their users to formulate and perhaps answer some key questions about e-firms, e-markets, and e-commerce in general.

New words

1. definition [ˌdefɪˈnɪʃən] *n.* 定义, 解说, 精确度, (轮廓影像等的)清晰度
2. entity [ˈentɪti] *n.* 实体
3. debit [ˈdeɪt] *n.* 借
4. minimal [ˈmɪnɪməl] *a.* 最小的, 最小限度的
5. graphics [ˈɡræfɪks] *n.* (作单数用)制图法, 制图学, 图表算法, 图形
6. host [ˈhəʊst] *n.* 托管
7. transmit [trænzˈmɪt] *v.* 传输, 转送, 传达, 传导, 发射, 遗传, 传播
8. antiquity [ænˈtɪkwɪti] *n.* 古老, 古代的遗物、古董
9. scarcity [ˈskeɪsɪti] *n.* 缺乏, 不足
10. forgo [fɔːˈɡəʊ] *v.* 作罢, 放弃
11. postulate [ˈpɒstjuleɪt] *n.* 假定, 基本条件, 基本原理
v. 要求, 假定
12. differentiate [ˌdɪfəˈrenʃieɪt] *v.* 区别, 区分
13. evolve [ɪˈvɒlʊ] *v.* (使)发展, (使)进展, (使)进化
14. trigger [ˈtrɪɡə] *v.* 引发, 引起, 触发
15. rigor [ˈrɪɡə] *n.* 严格, 严厉, 苛刻, 严密, 严酷, 精确

Notes About Terms

1. ATM: Automatic Teller Machine 自动柜员机。
2. World Wide Web: 万维网(WWW)。
3. e-market: 电子市场。
4. e-firm: 网络公司。

Notes About Sentences

1. By the same logic, using an electronic retail credit or debit card to purchase goods at a gas station or a local merchant would be excluded as well, but it would be e-commerce if the same consumer paid by credit card for an airline or hotel reservation over the Internet at a travel site such as Orbitz.com.

此句译为:“按此同样的逻辑,在加油站或者当地零售店通过使用电子零售信用卡或者借记卡进行消费也不属于此范畴,但是如果在像 Orbitz.com 这样的旅行网站通过信用卡支付机票或者酒店预订的同样消费行为则属于电子商务的范畴。”

2. This interpretation would hold if the information supplier acted with the intent of making a current or future profit on the transaction by, for example, hosting paid

advertising on the site or by linking the free service to a fee-based one.

此句译为：“假如信息提供者的行为带有获取当前或者潜在利益的意图，比如说通过在网站上登有偿广告或者链接免费服务到收费项目上，那么这一解释就是正确的。”

3. Yahoo. com provides free search information and a number of free services, including E-mail accounts, with the hope of attracting viewers to support banner advertising and possibly to access some of its fee-based services.

此句译为：“雅虎提供免费的搜索信息和一系列包括电邮账户这样的免费服务，它期望能够引起浏览者对标题广告的兴趣，同时使他们有可能进入去尝试它的另一些收费服务。”

Exercises

I . Fill in the blanks with the correct form of the words given below.

adopt	return	cognitive	vendor	testimonial
influence	uncertainty	quality	intermediary	service

While price is becoming the major factor ____ 1 ____ many Web purchasers, ____ 2 ____ is extremely important in many situations. When you buy a brand-name PC from Dell, IBM, or Compaq, you are fairly sure about the quality of the product or ____ 3 ____ you buy. When you buy from a not so well-known ____ 4 ____, however, quality can become a major issue. The issue of quality is related to the issue of trust, a trusted third-party ____ 5 ____ can be adopted to provide quality assurance. For example, TRUST-e and the BBB provide a ____ 6 ____ seal for participating vendors. The BBB is known for its quality assurance system of physically testing products.

The problem of quality is frequently referred to as the quality ____ 7 ____ . Customers have a ____ 8 ____ difficulty accepting products that they have never seen from a strange vendor. The BBB and TRUST-e seals can convince some customers but not all. Customers are not sure what they will get. Two possible solutions are usually ____ 9 ____ . one is to provide free samples, the other is to ____ 10 ____ if you are not satisfied.

II . Translate the following sentences into Chinese.

1. The Web allows for color, graphics, animation, and sound, all of which make the e-commerce event a more entertaining and potentially informative experience.
2. The Internet first came to life in 1969, and originally served as a vehicle for transmitting mostly scientific information among university and government computer networks.
3. Opportunity cost reflects the cost of using scarce resources in the current use and is measured in terms of the value of the best alternative forgone or what must be given up.
4. Competitive markets respond to the signals sent by product prices, resource costs, and firm profits or losses to offer the best, but not perfect, solution to getting the greatest value from the resources at the lowest possible cost.
5. However, e-commerce is less of a revolution that transforms markets, and more of

an revolutionary force that provide an added distribution channel that extends the range of transaction options.

Ⅲ. Translate the following sentences into English.

1. 万维网是在使用互联网技术上最受欢迎和最普遍的应用。
2. 生活总是围绕着生产什么,怎样生产,应该生产多少,谁获得多少份额这样的物质选择。
3. 竞争,价格信号和效率这些关键的经济概念帮助我们确定和组织这本书的话题,因为经济分析被用在电子商务上。
4. 互联网基础上的电子商务正在改变着个人消费者的行为和公司做商务的方式。
5. 在稀缺资源上使用的竞争市场的标准,价格信号的形成和对其的反应,战略行为,效率的概念,这些都是能够解释电子交易的有价值的经济概念。

Ⅳ. Answer the following questions.

1. What are the two key distinguishing features of this e-commerce definition?
2. How are the Internet and Web Based E-commerce changing both individual consumer behavior and the ways in which firms do business?

Text B E-Commerce Changes the Economics of Research

The economics of search owes its origin as a branch of inquiry to George Stigler “The Economics of Information”, and is a branch of economics that identifies both clock time and distance as two of many market frictions that hold implications for consumer behavior and market efficiency. Market frictions interfere with the assumption of perfect information that yields a smooth, continuous, and efficient exchange process. For example, market participants usually possess only imperfect information about key exchange variables such as the location of buyers and sellers, the range of prices offered for the same product, and the quality of the goods and services being traded. As a consequence of these frictions, traders are willing to spend some of their time and other resources to conduct a limited search of the marketplace prior to engaging in an exchange. The expenditure of resources on the search effort involves the implicit assumption that acquiring more information will improve the level of satisfaction that a trader receives as a result of an exchange.

Information acquisition usually displays diminishing returns relative to the increased expenditure on the search effort. Consequently, a tradeoff or tension exists between the value of the resources spent to acquire additional information and the value of the additional information acquired. Recognizing this tension, the economics of search postulates the existence of some optimal level of search up to the point when the value of the additional resources spent on the search process just match the value of the information obtained. This optimal search calculation is shown in Figure1-1. The marginal or incremental value curve (MV) is downward sloping and reflects the declining reward from searching for and acquiring additional information. The marginal cost curve (MC1) is

upward sloping indicating the increasing cost of searching for and acquiring incremental amounts of harder-to-obtain information. The optimal level of search (OLS1) appears at the intersection point of the two curves. Beyond the optimal point, additional search would be uneconomic or inefficient, as the added cost (MC) would exceed the added gain (MV). Part of the search literature involves the development of search rules that aid traders in determining when that optimal point has been reached.

The combination of the Internet and e-commerce empowers the consumer by both helping to destroy distance and working to eliminate clock time as frictions in the exchange process. It also improves market efficiency by reducing the cost of information search and widening the scope of the search process. The Internet allows consumers to get more information, faster, at a lower cost in terms of time and effort spent on the search activity. As such it works to benefit the consumer by tilting the exchange process in favor of the buyer. In Figure 1-1, buyer access to e-commerce information on the Internet has the potential of shifting the marginal cost curve down and to the right to MC2. The optimal level of search expands to OSL2 allowing the buyer to efficiently obtain additional amounts of information, thereby improving the results of the selection process.

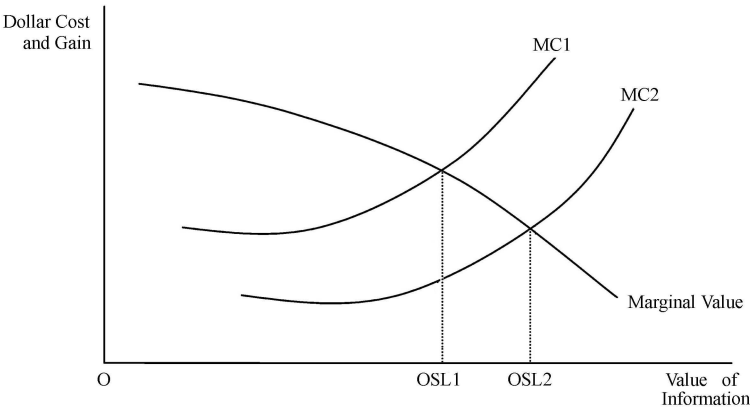


Figure1-1 The Economics of Search

Before the Internet, an individual who wanted to purchase a book had a limited number of bookstores in the neighborhood from which to choose. He could also go into the next town or state to widen his search area and make a purchase, but the cost of travel in time and gasoline would make overcoming distance uneconomic except in the rare instance where the extra search costs would be exceeded by the extra benefits. Now, not only can consumers buy books from a Barnes & Noble or Borders store, but from BarnesandNoble.com or Borders.com, the virtual bookseller. Amazon.com, sells books only in cyberspace, and offers books at prices that are usually below those at physical stores, with a wider selection and without sales taxes. If these options are not enough, the potential buyer can consult search engines, such as Yahoo, corn or Google.com among others, to find dozens or hundreds of potential sellers not just on the East or West Coast of the

United States but anywhere in the world. Not only is distance dead, but its demise radically changed the cost and calculus of the search process.

Still, book sales are child's play compared to the Internet's effects on the search costs and sales of other products. Suppose a potential car buyer wants to purchase a Honda Accord. If the consumer is lucky, three or four Honda dealerships operate within a 15-mile, local search radius. Traveling to each and getting prices is an expensive and time consuming activity. It might also be possible to contact them through their e-commerce site on the Web and get a cyber quote from each in less than 30 minutes. Consider the Honda dealers upstate or out-of-state as well. Would a buyer travel two hours round trip, just once, to a dealer fifty miles away to pick up the vehicle if he could buy the car over the Internet for \$300 to \$500 less? Most of us would at least consider this option. Distance is indeed dead!

E-Commerce Turns Differentiated Products into Commodities

If potential buyers conduct their e-commerce searches through the Internet, not only is distance dead and time irrelevant, but also products that were previously differentiated become more like commodities. In competition through product differentiation, producers spend a lot of time and money creating a distinct image or brand for their product. A Honda Accord is different from a Toyota Camry and from a Ford Taurus. These cars are differentiated not just by nameplate, but also by styling, features, quality and reliability, as well as dealer service reputation. The makers of different brands compete vigorously among themselves to attract your interest, create brand loyalty, and sell you their cars at a profitable price for themselves and for their dealers. This work is the essence of competition through product differentiation.

Commodities, on the other hand, are sold differently by producers and treated differently by potential buyers. Take, for example, the bananas being sold at several fruit stands as part of some farmers market. Bananas are a homogeneous product in that they are all the same within reason. United Fruit can put the "Chiquita" brand name on their product, advertise it, and try to convince you that it is better than the bananas sold by others, but most consumers aren't fooled. Buyers can tell almost everything they want to know about the bananas offered for sale just by looking at them. How big are they? How much do they weigh? Are they green, yellow, or overly ripe? Given satisfactory answers to the preceding questions, the only distinguishing feature now is the price. Generally, the consumer will buy from the seller at the farmers market with the lowest price per pound for bananas. This process is good for the consumer because it forces the seller to charge the lowest possible price. Price competition restrains the seller, however, because the lowest price slices away any excess profits that the seller might enjoy, which is the essence of competition through price.

So, what does this traditional economic tension between competition through differentiation versus competition through price have to do with cars and e-commerce?

Again, the answer is fairly simple. Buyers can get information on Accords, Camrys

and Tauruses from Consumer Reports or other sources. They can look at *Test drive*, and select *I options* for the different brands at their local dealer. Once they decide to buy an Accord rather than a Taurus, they can go to the World Wide Web and contact any number of Honda dealers who sell an identical product. They can get cyberquotes, dicker with the lowest-priced two or three sellers, and buy the car from the online dealer with the cheapest price. E-commerce empowered the buyer by turning a differentiated product into one with more of a commodity character. It is a matter of the large number of firms, selling the same product, that are two of the essential characteristics of competition through price. Lastly, if the buyer doesn't like contacting dealers and haggling over price directly, she can always go to one of the cyberdealers, such as Autonation. com. to conduct the purchase. E-commerce intensifies economic competition. E-commerce and the Web help to turn brands into commodities.

Reading Materials

Online Marketing Basics

E-mail marketing is one of the most effective ways to keep in touch with customers. It is generally cost-effective, and if done properly, can help build brand awareness and loyalty. At a typical cost of only a few cents per message, it's a bargain compared to traditional direct mail at \$1 or more per piece. In addition, response rates on E-mail marketing are strong, ranging from five to 35% depending on the industry and format. Response rates for traditional mail averages in the 1%~3% range.

One of the benefits of E-mail marketing is the demographic information that customers provide when signing up for your E-mail newsletter. Discovering who your customers really are-age, gender, income, and special interests, for example-can help you target your products and services to their needs. Points to consider when creating your E-mail newsletter:

HTML vs. Plain Text: Response rates for HTML newsletters are generally far higher than plain text, and graphics and colors tend to make the publications look far more professional. The downside is that HTML E-mail is slower to download, and some email providers may screen out HTML E-mail.

Provide incentive to subscribe: Advertise the benefits of receiving your newsletter to get customers to sign up for your newsletter, such as helpful tips, informative content, or early notification of special offers or campaigns.

Don't just sell: Many studies suggest that E-mail newsletters are read far more carefully when they offer information that is useful to the customers' lives rather than merely selling products and services. Helpful tips, engaging content, and humor are often expected to accompany E-mail newsletters.

Limit questions: As each demographic question you ask may reduce the number of customers signing up, it's best to limit the amount of information you solicit or give customers the option of skipping the questionnaire.

Establishing a Web Presence

Even if you choose not to sell your goods or services online, a business Web site can be a virtual marketing brochure that you can update on demand with little or no cost. Your presence on the Internet can be a useful marketing tool by providing richer pre-sale information or post-sale support and service. This might temporarily differentiate your product or service from your competitors'. E-marketing has lessened the disadvantage that

small businesses have faced for years when competing with larger businesses.

E-Commerce has redefined the marketplace, altered business strategies, and allowed global competition between local businesses. The term “electronic commerce” has evolved from meaning simply electronic shopping to representing all aspects of business and market processes enabled by the Internet and other digital technologies. SBA is preparing to help this new generation of Internet-enabled or eSmall Businesses.

Today’s business emphasis is on e-commerce-rapid electronic interactions enabled by the Internet and other connected computer and telephone networks. Rapid business transactions and unparalleled access to information is changing consumer behavior and expectations. The U. S. Small Business Administration (SBA) is reshaping its programs to better serve small businesses that taking advantage of the Internet and other emerging technologies.

Many small businesses assume that the Internet has little value to them because they feel that their product or service cannot be easily sold online. But inexpensive information processing and electronic media can help most small businesses provide better, faster customer service and communication.

Unit 4 Web Publishing

Text A Online Publishing

The web, it is suggested, provides a new channel for news distribution that overcomes the shortcomings of both the printed newspaper and of broadcast news on radio and television. The web can give news coverage that is as up-to-date as broadcast news but has the in-depth coverage available from a serious newspaper. Further than that, the browser could be set to select the news of interest to the reader and to leave out the rest.

Online publishing is the electronic delivery of newspapers, magazines, news, and other information through the Internet. It is often related to advertisement since it is provided free in most cases, to attract people to certain sites where advertisement is conducted. Developed in the late 1960s, online publishing was designed to provide online bibliographies and selling knowledge that was stored in online databases. Publicly funded online publishing originated for the purpose of medical, educational, and aerospace research programs. Today, online publishing has different purposes. It is related to worldwide dissemination of information and to advertisement as well. The potential of new interactive technologies and other Internet applications aided the growth of online publishing.

Since 1995, some organizations have learned to use online publishing for gaining competitive advantage and market share. However, this was not always the case. Other organizations did not understand customer behavior regarding the uses of online publishing as a business tool. High technology without proper and impressive content was not enough to attract and retain customers' attention. Business organizations eventually realized that paying attention to the customers' needs and wants was an important factor in making online publishing a business tool.

One of the oldest examples of disseminating information by online publishing is the publishing of scholarly works for peer review. Today, online publishing is mainly used for disseminating information and for conducting sales transactions interactively. Magazine and newspaper publishers such as *Ad Week*, *PC Magazine*, *The Wall Street Journal*, and *The Los Angeles Times* are examples of the uses of online publishing for the dissemination of information. In the future, online publishing will include more customized material that the reader will receive free or will pay for.

There are a number of online newspapers available and most of them are web versions of existing newspapers. The *Washington Post* is the one that has, to date, received the most favorable coverage. Currently access, with a couple of exceptions, is free.

The online newspapers, it seems, are often used to look up something that has been missed in a previous issue or to look at the job advertisements, rather than being read as a newspaper. Online magazines attract some readership but they have had a hard time attracting subscriptions—there is the ethos that the net should be free and there is also a concern that the magazine might not be as good as it pretends to be or that it may not last the period of the subscription.

There is, however, a threat to conventional newspapers from the web. A large part of the revenue that pays for newspapers comes not from the cover price that the reader pays but from the money received from advertisers. The web has the potential to advertise jobs, houses and used cars at a fraction of the price of a newspaper—should the advertising of these items shift to the web then it might not be possible to buy our daily or local newspaper, at least not at a price that the public is prepared to pay.

Online publishing includes newspapers, magazines, news, textbooks, music, artwork, video clips, and movies. Several online publishing methods are in use. They include the online archive approach, new medium approach, publishing intermediation approach, and dynamic or just-in-time approach.

The online archive approach is a digital archive such as library catalogs and bibliographic databases. It basically makes paper publications available online. The new medium approach is used by those publishers that view the Web as a medium for creating new material. This form of publishing adds extra comprehensiveness to any issue or topic that traditional magazine publishing cannot offer. One way that the new medium does this is through its ability to integrate hypertext links that offer related stories, topics, and graphics. It also can be easily customized. The new medium approach also offers up-to-date material including breaking news. An example is Hotwired (www.hotwired.com), which complements a paper version of Wired Magazine.

The publishing intermediation approach can be thought of as an online directory for news service. Publishing intermediation is an attempt to help people locate goods, services, and products online. Netscape provides services that are an example of this approach. The dynamic or just-in-time approach is another method of online publishing. With this approach content can be created in real time and transmitted on the fly in the format best suited to the user's location, tastes, and preferences. What makes dynamic publishing so “dynamic” is its ability to customize the content transmission of its web pages to satisfy the users' preferences. The just-in-time portion of this approach refers to the ability to allow Java's applets and planned content to stream into the user's computer as they are needed and then destroy themselves once their function is no longer necessary.

Online publishing has also grown into other areas of usage with concepts such as edutainment and push technology. Edutainment is a combination of education, entertainment, and games. One of the main goals of edutainment is to make the student become an active learner instead of a passive one. With active learning a student is more

involved in the experience of learning and, therefore, it makes the learning experience richer and the knowledge gained more memorable. The idea behind edutainment is that it is a type of embedded learning. It helps students to learn without them knowing it. Edutainment covers various subjects for the active learner; such as mathematics, reading, writing, history, and geography. Edutainment games are targeted to varying age groups ranging from three-year-old to adults and are also used in corporate training over intranets. Examples of edutainment vendors are Broader Bound Software Inc. and Software Tool works.

There are managerial issues to consider with edutainment in online publishing. Educational games are delivered mostly as CD-ROMs. However, since 1998 there is an increasing number of companies that offer edutainment online in a distance-learning format.

New Words

1. in-depth *a.* 深入的, 彻底的
2. bibliography [ˌɪbɪbliˈɒɡrəfi] *n.* (有关一个题目或一个人的)书目, 参考书目
3. aerospace [ˈɛərəʊspeɪs] *n.* 航空宇宙
4. dissemination [dɪˌsemiˈneɪʃən] *n.* 分发, 散布
5. interactive [ˌɪntərˈæktɪv] *a.* 交互式的
6. journal [ˈdʒəːnl] *n.* 定期刊物, 杂志, 航海日记, 分类账
7. medium [ˈmiːdʒəm] *n.* 媒体, 方法, 媒介
a. 中间的, 中等的, 半生熟的
8. impressive [ɪmˈpresɪv] *a.* 给人深刻印象的, 感人的
9. scholarly [ˈskɒləli] *a.* 学者气质的, 学者风度的
10. subscription [sʌbˈskɪpʃən] *n.* 捐献, 订金, 订阅, 签署, 同意
11. ethos [ˈiːθɒs] *n.* 气质, 道义, 民族精神, 社会思潮, 风气
12. conventional [kənˈvenʃənəl] *a.* 惯例的, 常规的, 习俗的, 传统的
13. revenue [ˈrevɪnjuː] *n.* 收入, 国家的收入, 税收
14. intermediation [ˌɪntə(ː)ˌmiːdiˈeɪʃən] *n.* 调停, 仲裁, 调解
15. directory [dɪˈrektəri] *n.* 姓名地址录, 目录
16. taste [teɪst] *v.* 品尝, 辨味, (of)有……味道, 领略
v. 体验, 感到
n. 味道, 味觉
17. memorable [ˈmemərəbl] *a.* 值得纪念的, 难忘的

Notes about Terms

1. Intranet: 内联网或内域网。
2. CD-ROM: 光盘驱动器;(计)光盘只读存储器 (compact disc read-only memory)。
3. Video clip: 视频短片。
4. Just-in-time: 即时的(JIT)。

Notes about Sentences

The just-in-time portion of this approach refers to the ability to allow Java's applets and planned content to stream into the user's computer as they are needed and then destroy themselves once their function is no longer necessary.

这种方法的即时部分是指该方法能够使 Java 小程序和计划好的内容在用户需要的时候导入用户的计算机,而在这些功能一旦不再需要时能够自毁。

Exercises

I. Fill in the blanks according to the text.

Advertising is an attempt to _____ 1 _____ information in order to effect a buyer-seller transaction. In a traditional sense, advertising was _____ 2 _____, one-way mass communication or mass marketing, which was paid for by sponsors. Telemarketing and direct mail were attempts to personalize _____ 3 _____ in order to make it more effective. These _____ 4 _____ marketing approaches worked fairly well but were expensive. The Internet redefined the meaning of advertising. The Internet has enabled _____ 5 _____ to interact directly with advertisers and advertisements. In _____ 6 _____ marketing, a consumer can _____ 7 _____ with his or her mouse on an ad for more information or send an E-mail to ask a question. The Internet has provided the sponsors with _____ 8 _____ communication and E-mail capabilities, as well as allowing the sponsors to _____ 9 _____ specific groups on which they want to spend their advertising dollars, which is more accurate than traditional telemarketing. Finally, the Internet enables a truly _____ 10 _____ advertisement.

II. Translate the following sentences into Chinese.

1. The web can give news coverage that is as up-to-date as broadcast news but has the in-depth coverage available from a serious newspaper.
2. It is often related to advertisement since it is provided free in most cases, to attract people to certain sites where advertisement is conducted.
3. Business organizations eventually realized that paying attention to the customer's needs and wants was an important factor in making online publishing a business tool.
4. The online newspapers, it seems, are often used to look up something that has been missed in a previous issue or to look at the job advertisements, rather than being read as a newspaper.
5. What makes dynamic publishing so "dynamic" is its ability to customize the content transmission of its web pages to satisfy the users' preferences.

III. Translate the following sentences into English.

1. 网络出版是以国际互联网为载体和流通渠道,出版并销售数字出版物的行为。
2. 网上出版已成为传统出版业的重要竞争对手,不管人们承认与否,网络正以令人不可思议的速度日渐成为当今世界最大众化、最重要的一种传播媒体。

3. 网络出版通过分布在各地的计算机和信息系统形成了一个虚拟的、超越国别的、超越文化差异的信息共享空间,使人类的信息资源得到了最大限度的利用。

4. 超文本、超媒体技术的发展使网上信息的传播可以在声音、图像、文字之间实现自如而从容的转换。

5. 从观念上真正把出版业作为信息产业的一部分来发展,打破行业界限,与电子电信业融为一体。

IV. Answer the following questions.

1. Summarize the forms of online publishing and compare them with traditional printed publishing.

2. Briefly explain what publishing methods are in use.

Text B Opportunities and Risks of Electronic Publishing

An introduction of Rentrop publishing

Rentrop Publishing (RP), headquartered in Bonn, Germany, was founded in 1975. With about 300 authors and 160 employees, RP is one of Germany's most important business-focused publishers. One corporate objective is to become world leader in speech-writing consultancy.

RP's core business is consultative journalism for entrepreneurs and people concerned with entrepreneurship. RP's products includes magazines, loose-leaf services, newsletters, and books covering topics such as advertising, public speaking, money management, taxation and social security, human resources as well as personnel law.

Market expansion is problematic for RP. The Internet offers the possibility to develop and market new products to new customers. On the other hand, the company still sees a number of horizontal expansion possibilities in its conventional business, for example, in the areas of contract or controlling consulting.

Decisions before entering the EP' business

The entry into EP could enable RP to further extend its successful notion of the consulting pyramid. Offering products and services electronically, most likely via the Internet, would be equivalent to expansion of the pyramid by an additional base layer of digital consultative journalism. Content (consulting) provision via the Internet, could vastly increase the number of potential customers per service to about 100,000.

But RP is unsure about the likely role of the Internet in its business model. In order to analyze further the opportunities and the risks, the paper investigates three main decisions to be considered by RP.

1. Timing of entering EP activities

There are two basic options for the timing of entry into EP activities: (1) to be an innovator and early adopter which would suggest becoming active on the Internet as soon as possible, or (2) to wait and learn from the first experiences of other companies before attempting one's own strategy.

In the current hype about the Internet, most researchers and consulting sources suggest going on the Internet as early as possible, even if the first phase is mainly for learning purposes. Not entering EP is considered to endanger publishers' survival in the long run, robbing them of expansion and growth potential. As entry barriers are rising quickly, late entry may make it more difficult to establish a sufficient customer base.

While RP is aware of these arguments, the company stresses that according to various sources the profit potential of EP is still doubtful, and that EP represents only about 1%~3% in value of traditional publishing markets.

In contrast to trying to be first, RP proposes the strategic concepts of an innovative imitation' and a fast second'. This strategic approach implies applying a business model, proven successful in one market to a different market for which it is truly innovative.

In his argument, Rentrop identifies the following three prerequisites for the successful application of the innovative imitation' strategy: (1) there is not one world market, but several separate markets where an innovation in one would not necessarily be an innovation in another, (2) there are similar markets with free market access, (3) information about innovations, their concepts and their success is available.

From these prerequisites it is arguable as to what extent the strategy of innovative imitation' can be successful for potential EP activities. Prerequisite (1) seems to be at risk. The claim is that the Internet leads to one world market, although Rentrop would question this, as he assesses RP's products to be very language, legislation and culture dependent.

2. EP value chain activities to be offered

In its traditional business model, RP's core competence is the creation and provision of first-class, focused, almost unique content. Critical to the business is finding experts who commit themselves to regular publications (exclusively for RP). Only two of the current 42 editors and their respective teams are RP employees, while the rest are freelancers with a commitment to write only for RP. The following discussion focuses on RP inclusive of its freelancers.

In order to successfully distribute its products and also to provide appropriate customer support, RP needs to continue operating as a publishing house. It only disseminates content that is exclusively written for it.

Taking this main focus on content creation into account, it is necessary to analyze

potential activities in the EP business in order to determine which offer the best opportunities for RP.

This analysis uses the EP value chain as the basis for further discussion. It differentiates two layers: the content-related layer addresses 'Content Creation', 'Content Packaging', and 'Market Making'; while the infrastructure-related layer comprises 'Transportation', 'Delivery Support' and 'End User Interfaces'.

Within this framework, the European Commission suggests that publishers may want to choose from the following roles to position themselves in their move from traditional to electronic publishing: (1) Online network: Managing a full electronic marketplace; (2) Community organizer: Focusing on an interest-centered target group; (3) Interactive studio: Creating content with new levels of functionality; (4) Content rights agency: Managing rights and matching content to market needs; (5) Platform provider: Creating an end-to-end easy to use technical platform for authors, publishers and/or end users.

For a mid-sized, content-focused publisher like RP, however, these market entry strategies currently do not look attractive. First, as mentioned, RP prefers to be a 'Fast Second', i. e. new business models should be tested by other companies such as potential competitors, before RP begins to pursue them. Second, and more importantly, RP, in conjunction with its editors, currently sees its strengths in 'Content Creation', 'Content Packaging' and 'Market Making'. The infrastructure needs, which are required in any of the business models, as well as the technical production, are outsourced to a variety of specialized companies.

Following its strategy of 'innovative imitation', RP aims to transfer its current core competencies into the EP world. Physical distribution, technical delivery support, and interface design are, on a small scale, considered barely feasible and unprofitable. The outsourcing strategy already in place in the conventional business needs to continue for necessary competencies in the EP era, such as cryptography, platform management, billing, inter-publisher clearinghouse functions, and vendor transactions management.

RP still regards itself a specialized publisher whose competitors (if any) are mostly other publishing houses using similar methods to provide content, i. e. who have the same core activities and competencies. However, it is more likely that other companies will become equally good at production, delivery and customer support activities than they start offering competing content. According to Norman Rentrop, no other company in Germany provides similar content.

Therefore, following one of the basic rules for moving into the Information Society -- leveraging one's core competencies--RP advocates a clear strategic decision. If it becomes active on the Internet with its products, it will clearly focus on content creation and packaging (be this EP or not).

3. Digitalization of traditional products versus new products

The third angle to be analyzed is whether to digitize and, in terms of formatting, adjust existing products, or create new content to be distributed via electronic channels only.

Within the range of EP activities, the first option is to take existing products, especially information letters, magazines, and loose leaflets, and prepare them (without significantly changing the content) for presentation and distribution on the Web. While this approach is comparatively inexpensive and technically undemanding, RP still deliberates on three major issues: (1) Is there enough interest from its customers for electronic products? How soon will its current customers become active on the Web? (2) Will the issue of copyright protection have a significantly stronger negative impact on electronic media than it has on print media? (3) Will the issue of product line cannibalization reduce sales of print media, or can separate customer groups be maintained for the same product offered through different media?

The alternative option is to develop a separate line of business for the EP market. As outlined, instead of getting involved in innovative roles within the EP segment, RP would focus on leveraging its core competencies from print. Consequently, RP's new business line would only consist of new products written by additional editors and their teams to serve diverse customer needs.

Since EP delivery costs are negligible, RP could aim at developing legislation- and culture-independent products attractive to potential customers worldwide. Further, the significantly higher interaction potential offered by EP in comparison to conventional publishing would allow more precise customization of new products to customer needs. Customer expectation could be met to a greater degree.

Conclusion

This paper has considered if a mid-sized specialized publisher like RP should enter electronic publishing. The analysis of risks and costs shows how different the EP business model is from the traditional one. As long as the necessary changes have not been implemented, rushing into EP appears risky and a positive return is doubtful. In this respect, RP's strategy seems to be appropriate.

Reading Materials

Assessing the Need for an Online Store

Internet consultants once claimed it was possible to sell anything over the Internet. But the recent dot-com downturn has shown that this isn't the case. It's true that the Web is a great way for customers to order many types of products and services. And almost any small business can benefit from a Web site that spreads the word about its products or services. But not every firm will benefit by inviting customers to order its products directly over the Internet.

If you're thinking about issuing such an invitation, there are a few considerations to keep in mind:

Your niche. The biggest Web-based retailers spent millions of dollars to establish themselves-and many of them are no longer in business. Growing businesses can't compete on this level, and they probably wouldn't want to. Many online businesses, however, have successfully targeted underserved market niches-for example, selling out-of-print sailing books.

The same goes for market segments such as CDs, videos, drugstore items, and software. Make sure your site offers something special that customers won't find on sites run by the Internet giants-or for that matter, at the corner store.

Your competition. Chances are someone else already sells your product over the Web. In fact, the online competition might be fierce. That doesn't mean you should steer clear of it, however. Instead, you can try to figure out ways to steal market share.

Review your competitors'sites and improve upon them. Your typical competitor's Web site may download slowly or have poor aesthetics. Or maybe the company doesn't offer a strong enough selection; maybe you can offer a fairer price. If nothing else, perhaps you can be the first company to sell a given product with great customer service, on-time delivery, or a money-back guarantee.

The nature of your product. Some products sell especially well on the Internet. You should decide if your goods fit that description. CDs and DVDs sell well on the Internet because it's easier to gather information about them online than in a store. Books sell well on the Web because it's easy to build a community of customers who will review the books they purchase and read other customers' reviews. In both cases, sites can track customer preferences and suggest possible purchases-as a result, customers often buy more items than they intended initially. And consumers know that a copy of a book or CD they buy online will be identical to a copy they'd buy in a store.

The Web also is a great place to sell products that most people don't like to shop for.

On the other hand, there are some things consumers need to touch or try out in person before they buy: You can't test a lounge chair or try on lipstick over the Internet. That said, if you have both a store and a Web site, customers can check out items in your store and then purchase them later online.

The nature of your business. You should also consider the logistics of selling certain items over the Web. Even if you offer low prices, for example, shipping charges could make it cheaper for customers to shop for the same products locally. Customer service is another touchy issue; many online stores suffer because they can't offer the level of service customers expect from brick and mortar stores. And the more products your online store offers, the more careful you'll have to be about tracking your inventory. You don't want to risk having customers buy out of stock or discontinued products.

As many online businesses have learned, shipping, customer service and other overhead costs can quickly outweigh any extra business you generate through your Web site.

Unit 5 Logistics

Text A Logistics in Electronic Commerce

1. Introduction

Logistics-the movement or flow of people, materials and information-is an important part of any company's business strategy. The term has its origin in things military, and it was not until the last quarter of this century that business organizations (which expended up to 30 percent of total cost on achieving effective distribution of their products) began to take the subject seriously.

Logistics seeks to identify the cheapest way of achieving a given level of availability or service to customers. There are five key elements:

- (1) unitization-the product or service;
- (2) facilities-where the product or service is made available;
- (3) communications;
- (4) inventory;
- (5) transportation.

The challenge is to achieve the requisite availability through trade-offs between each element. For example, many women's fashions last for only a short season. Preparations for launch normally have a sufficiently long lead time to enable suppliers to source items from across the world at the lowest cost. Cost-effective transportation can be accomplished by sea container and inventory can be set conservatively in case the fashion does not take off. But if the fashion does catch hold, the supplier needs to know as quickly as possible, to allow him or her to find and deliver more items to retail stores. The additional items can seldom come by the cheapest form of transport or they will arrive too late, nor can they be made far away by the cheapest source unless high-cost transport is used such as air freight. The speed with which the supplier receives feedback from the information system on sales uptake determines his ability to meet demand.

Usually reliability and consistency in the level of service are more important than speed. If a promise is made, it must be kept. The speed required depends on the context in which the need has arisen. Item designations of A, B and C have been used in inventory control for many years. Item A must be available at all times oxygen in a hospital, or engines at the right assembly point in a car manufacturing plant but others, such as a light bulb in a home, can be regarded as B or C items. You can borrow one from another room. Also, it is unlikely that most customers will change their choice of car because availability

is not immediate. However, with a chocolate bar or drink they will buy a different brand or go elsewhere.

2. Integrated logistics information system (ILIS)

As goods move, so must information. To move the right goods to the right place at the right time in the right condition with the right documents, the answers to all the “right” questions must be known. Where should the truck driver pick up this shipment? Who should receive this package? How much inventory of an item is in stock and how much should be produced? Where is this shipment now? Information permeates the logistics system, but, like goods, it must go to the right people at the right time in a useful form. The information could be as simple as the contents of a package that just arrived or as complex as the proposed design for a new supply chain for heavy equipment. The essence of information systems in logistics is the conversion of accurate data into useful information. Inaccurate data and poor information disrupt logistics activities. Of course, even with accurate data and good information, someone must act on it.

Integrated logistics is defined as; the process of anticipating customer needs and wants; acquiring the capital, materials, people, technologies, and information necessary to meet those needs and wants; optimizing the goods-or service-producing network to fulfill customer requests; and utilizing the network to fulfill customer requests in a timely way. It consists of inbound logistics, conversion operations, and outbound logistics. Inbound logistics is the movement of products into a firm. Conversion operations involve the movement of products within a plant and/or warehouse facility. Outbound logistics is the movement of product out of the plant to the customer.

Peak logistics efficiency and effectiveness demand a superior integrated logistics information system (ILIS). Without ready access to accurate information, integrated logistics operations lose both efficiency and effectiveness. Integrated logistics will not sustain a strategic, competitive edge. Priority applications of ILIS are inventory status, tracing and expediting, pickup and delivery, order convenience, order accuracy, balancing inbound and outbound traffic opportunities, and order processing. The quality of the information flowing through the ILIS is of utmost importance. The saying “garbage in-garbage out” applies to any information system. Three concerns stand out on quality information; (1) getting the right information, (2) keeping the information accurate, and (3) communicating the information effectively.

Defining the Integrated Logistics Information System (ILIS) An integrated logistics information system can be defined as; the involvement of people, equipment, and procedures required to gather, sort, analyze, evaluate, and then distribute needed information to the appropriate decision-makers in a timely and accurate manner so they can make quality logistics decisions.

An ILIS gathers information from all possible sources to assist the integrated logistics

manager in making decisions. It also interfaces with marketing, financial, and manufacturing information systems. All of this information is then funneled to top level management to help formulate strategic decisions.

The ILIS has four primary components: the order processing system, research and intelligence system, decision support system, and reports and outputs system. Together, these four subsystems should provide the integrated logistics manager with timely and accurate information on which to base decisions. These subsystems interface with the integrated logistics managerial functions and the integrated logistics management environment. Before information is developed, information needs must be determined. Likewise, once the information is generated based on a needs assessment, it is then distributed to the integrated logistics manager.

The Order Processing System is without a doubt the most important subsystem. Order processing is the set of activities necessary to make the correct goods ready for shipment to the customer-right up to the point where warehousing assembles the order. Processing the order includes checking customer credit, crediting a sales representative's account, ensuring product availability, and preparing the necessary shipping documents. The seller should be able to control order cycle activity. Order processing time has been shortened largely through computer applications.

Research and Intelligence System (RIS) continually scans and monitors the environment, observing and drawing conclusions about the events that affect integrated logistics operations. The RIS scans and monitors the intrafirm environment, the external environment, and the interfirm environment. The external environment includes those events taking place outside the firm and normally out of the firm's control. The interfirm environment includes elements in the external environment that directly affect the firm and over which the firm does exercise some control, such as the channel of distribution. The intrafirm environment includes the internal work of the firm and the elements that are controlled by the firm.

Decision support systems (DSS) are computer-based and provide solutions to complex integrated logistics problems using analytical modeling. The heart of any DSS is a comprehensive database containing the information that integrated logistics managers can use to make decisions.

The final subsystem of ILIS is the reports and outputs system. Normal reports are used for planning, operating, and controlling integrated logistics. Planning output includes sales trends, economic forecasts, and other marketplace information. Operating reports are used in inventory control, transportation scheduling and routing, purchasing, and production scheduling. Control reports are used to analyze expenses, budgets, and performance.

3. Electronic data interchange (EDI) and integrated logistics

Electronic data interchange (EDI) involves direct links between computers. EDI is used extensively in integrated logistics information systems. EDI enhances the breadth, timeliness, and quality of data. EDI applies to nearly every aspect of integrated logistics from paperless documentation flows to warehouse management with bar code scanners and radio frequency tags. Advantages of EDI include cost reductions, productivity gains, faster order cycle times, better focus on the customer, and reduced clerical work, paper, and postage. To realize these benefits, the firm must adopt certain rules: (1) trading partners must cooperate in establishing the new system and improving transaction flows, (2) key company personnel must lead the implementation of EDI, (3) the company must invest the time necessary to implement EDI, and (4) the firm must adhere to EDI standards. EDI is not a goal but a means to achieve a competitive edge, leadership within the channel of distribution, improved customer service, higher profits, better working relationships with trading partners, and better management over the information in the firm.

A major problem with EDI is standardization of the language. There are two basic standards in the world today, ANSI ASC X12 and EDIFACT¹⁰. Both are designed for global communications, but they are not necessarily compatible with each other. The United Nations developed EDIFACT, while ANSI X12 is used in the United States.

New Words

1. logistics [lə'dʒɪstiks] *n.* 后勤学, 后勤, 物流
2. inventory ['invəntri] *n.* 详细目录, 存货, 财产清册, 总量
3. requisite ['rekwɪzɪt] *a.* 需要的, 必不可少的, 必备的
n. 必需品
4. freight [freɪt] *n.* 货物, 运费, 货运
v. 装货, 使充满, 运送
5. permeate ['pɜːmieɪt] *v.* 弥漫, 渗透, 透过, 充满
6. essence ['esns] *n.* 基本, [哲]本质, 香精
7. integrated ['ɪntɪgreɪtɪd] *a.* 综合的, 完整的, 整合的, 一体的
8. optimize ['ɒptɪmaɪz] *v.* 使最优化
9. utilize ['juːtɪlaɪz] *v.* 利用
10. inbound ['ɪnbəʊnd] *a.* 内向的, 内部的, 内地的
11. outbound ['aʊtbaʊnd] *a.* 外向的, 向外的, 开往外地的
12. subsystem ['sʌb'sɪstɪm] *n.* 次要系统, 子系统
13. managerial [ˌmænə'dʒɪəriəl] *a.* 管理的
14. assessment [ə'sesmənt] *n.* 估价, 评估, 被估定的金额
15. analytical [ˌænə'lɪtɪkəl] *a.* 分析的, 解析的
16. paperless ['peɪpələs] *a.* 无纸的

Notes about Terms

1. ILIS: Integrated Logistics Information System 一体化后勤信息系统。
2. RIS: Research and Intelligence System 研究和情报系统。
3. DSS: Decision Support Systems 决策支持系统。
4. EDI: Electronic Data Interchange 电子数据交换。

Notes about Sentences

1. Logistics—the movement or flow of people, materials and information—is an important part of any company's business strategy. 后勤——人口、物资信息的运动或流动——是公司商业战略的一个重要部分。

2. The Order Processing System is without a doubt the most important subsystem. Order processing is the set of activities necessary to make the correct goods ready for shipment to the customer—right up to the point where warehousing assembles the order. 毫无疑问, 订单处理系统是一个最重要的子系统。订单处理包括一系列为顾客交付合适货物的必要活动, 向上直到仓库的装配活动。

3. The ILIS has four primary components: the order processing system, research and intelligence system, decision support system, and reports and outputs system. Together, these four subsystems should provide the integrated logistics manager with timely and accurate information on which to base decisions. ILIS 由四个基础的组成部分: 订单处理系统、研究和情报系统、决策系统、报表与输出信息系统。所有这四个子系统加在一起将为后勤经理提供及时准确的信息, 依据这些信息, 决策得以做出。

Exercises

I. Fill in the blanks according to the text.

E-commerce means business by Internet. It's a new business that creates a 1 space for business logistics and provides some convenient conditions for enterprises' timely control of their whole logistics system. The all functions of logistics may works through virtual ways with E-commerce. In this 2 seeking organization in logistics can make commodity distribution the highest efficient with the fewest cost, the shortest distant and time by a variety of methods. The main 3 of E-commerce on commercial the business mode appears as:

Firstly, E-commerce may transform logistics organization and management of commercial enterprises. Logistics always is organized and managed by a single enterprise in traditional economy. However, E-commerce requires that logistics must be 4 organized and managed in the whole society.

Secondly, E-commerce will change the competitive situation among the commercial enterprises. Although the drastic 5 leads to enterprise' high-quality service and lower logistics fee in traditional economy, the effect of this competition will greatly go

down in E-commerce era even if this competition still exists. The main reasons are the reasonable and higher-efficient _____ 6 _____ of goods supported by E-commerce in global logistical system which a single commercial enterprise can't reach no matter how large its business scale is.

Thirdly, E-commerce will promote the enterprises' logistics management. The enterprise' logistics management level directly determines and affects its logistics _____ 7 _____. It also influences the achievement of E-commerce's high-efficient advantages. None but promoting the logistics management level, establishing scientific, reasonable modern management arrangement and applying scientific management means and _____ 8 _____ in logistics management can insure smoothly distribution movement and highly-efficient, reasonable logistics to develop E-commerce.

Finally, E-commerce calls for the high-quality people who _____ 9 _____ in business logistics. E-commerce needs not only higher administrators in logistics management field but also the ones with the wider _____ 10 _____ in E-commerce. Even more, those people can effectively bring the two parts into together in their practice.

II . Translate the following sentences into Chinese.

1. It was not until the last quarter of this century that business organizations began to take the subject seriously.
2. As goods move, so must information.
3. The saying “garbage in-garbage out” applies to any information system.
4. Without ready access to accurate information, integrated logistics operations lose both efficiency and effectiveness.
5. Electronic data interchange (EDI) involves direct links between computers.

III . Translate the following sentences into English.

1. 电子商务要求企业物流系统必须由全社会系统地组织和管理。
2. 商品的大小、特性、需求的紧迫性及产品包装物运送的距离决定电子商务购买产品的递送系统。
3. 信息渗透到物流系统,但是,像货物一样,它必须以有用的形式在合适的时间到达合适的人。
4. 错误的及不完善的信息扰乱物流活动。
5. 电子数据交换的主要问题是语言的标准化。

IV . Answer the following questions.

1. What is ILIS? And talk about it briefly.
2. What is integrated logistics?

Text B The Logistics Gaps in China

China's unprecedented economic growth has strained its logistics infrastructure to the limit. The simple movement of goods is challenged by insufficient good highways,

antiquated roads and ports, overstressed civil aviation, and the country suffers from an underdeveloped telecommunications network. Transport and warehousing capacity has not kept up with the growth in consumer demand, making it increasingly difficult for manufacturers and marketers in China to get their products quickly, safely and reliably to customers. One industry estimate calls for more than \$230 billion to be spent on basic infrastructure investment over the next five years for the current level of economic growth to be sustained.

The logistical challenge has been generally overlooked until recently. However, unless the problems are tackled, they could fundamentally block the success of most large-scale investments in China. For companies able to fill the logistics gaps the growth opportunities are enormous.

Up until 20 years ago, manufacturing, distribution and commerce in China were dominated by state-controlled production planning. In the late-1970s, the country launched a reform program that opened the doors for some elements of the supply chain to non-state and foreign enterprises. In 1992, this reform accelerated under the guidance of the late Deng Xiao Ping: investments became more longer term, and shifted toward more capital-intensive projects involving technology transfer and infrastructure improvement.

But although some privatization of the economy has now occurred, logistics remain largely state-controlled; for example, 90 percent of transport and warehousing is still in the hands of state bodies. Wholesaling is undertaken by both state and domestic private enterprises, and retailing is served principally by state and collective stores, although a limited amount of foreign retailing has recently been introduced.

Despite some advances and reforms, several key issues affecting China's logistics remain:

- Participation of foreign distribution, warehousing and wholesaling providers is still restricted, and allocation of capital to the warehousing sector remains a low priority.
- Lack of coordination between the central and provincial governments continues to be a problem, especially in seeking approvals.
- The need for multiple approvals for most activities is still the norm.
- As essential commercial legislation continues to develop and evolve, the importance of personal and business relationships remains paramount.

In such an environment of burgeoning demand, inadequate infrastructure and predominantly state-controlled logistics resources, multinational firms operating in China face a number of barriers to logistics success. Limited infrastructure poses one key challenge: railway and quality trucking capacity are limited; waterway and coastal shipping links are not yet fully developed; and air links remain limited and expensive. China's sheer scale in itself presents a formidable barrier the country has 350 cities with more than 200,000 people, with many more to be built over the next decade.

Legal and bureaucratic hurdles abound; navigating through the Chinese bureaucracy and its licensing and approval procedures remains a difficult and time-consuming task, complicated by rapidly changing rules. The time and resources needed to train staff to world-class quality methods adds significantly to costs. Finally, understanding the Chinese culture poses one of the most perplexing barriers for many foreign managers. Developing a network of “guanxi”, or relationships, is usually essential to penetrate bureaucratic walls. Establishing and maintaining credibility is especially important as mistakes, especially those committed by foreigners are not quickly forgotten.

Despite these barriers, China has a desperate and growing need for efficient, reliable, high-quality logistics providers operating on a national level. A broader and higher level of logistics-service performance is becoming of increasing importance; quality and value provided in transport and warehousing are receiving greater attention.

The majority of foreign-owned plants are currently using non-integrated local systems for handling their distribution. However, a limited number of foreign service providers have been allowed to work with operators of local warehouses and to commit some funding and technology to overcome current limitations.

Multinational corporations investing in China are often frustrated by the country’s underdeveloped logistics capabilities. But for companies with a tolerance for risk, logistics-improvement opportunities in China represent an enormous opportunity. While future economic progress is unlikely to be smooth, particularly following the death of Deng Xiao Ping, it is nevertheless expected to strengthen overall. Living standards will continue to improve in coastal regions while accelerating inland; urbanization will also increase further.

Capital investment in infrastructure is likely to be outpaced by demand, despite the government’s aggressive plans. As consumer demand accelerates and becomes more sophisticated, requiring wider product ranges, higher quality and better service, the demand for improved logistics capacity and capability will continue to rise.

In China, where economic growth has strained the logistics infrastructure to breaking point, those foreign companies who can develop the means to deliver the goods stand to gain substantial competitive advantage, enabling them to generate real growth from this huge market. A successful growth strategy in China will require understanding of current realities and the vision to help build the logistics infrastructure of the future.

Getting logistics on to the boardroom agenda

One of the most common complaints of logistics managers who try to get things done is that no one else cares. They want to introduce new information systems, review transport arrangements, redesign packaging or further automate the warehouse but no one seems to have the time or inclination to listen. Here, Abby Day explains why senior management support, particularly board level support, is so important.

Logistics is all-encompassing throughout the organization. It includes everything from the moment a product or service needs to be made, through to incoming raw materials

management, production, finished goods storage, delivery to the customer and after-sales service. Indeed, the most common definition of logistics reflects this; a time-based activity concerned with the profitable movement of information and materials into/through the organization and out to the customer. Logistics spans everyone's territory, although the accountabilities and responsibilities are not so clear. It is best considered as an activity rather than a function.

Senior management support is needed for another reason; logistics is the essence of the organization's relationship with the customer the revenue generator. This is where the money comes from; it is the reason for being in business. The marketing people have told the customer about the product and its benefits, and the "promise" is about to be delivered. It is what Jan Carlson at SAS describes as the "moment of truth". Will the customer receive the product or experience the service in the way he has been led to expect? Will the company make good its promise? Only the way logistics responds will determine this it makes or breaks the customer relationship. Even if the product is faulty, logistics will be held to account; was it a problem of component parts? Was it damaged in delivery? Was it past its sell-by date?

So, logistics touches every part of the organization and it fulfills the marketing promise. But there is one other reason for getting logistics on to the boardroom agenda profitability. Logistics costs, as a percentage of sales revenue, vary widely depending on how you account for them whether you include all costs (even manufacturing), how you account for inventory of both raw materials and finished goods, how overheads are determined. However one goes about it, one cannot avoid the fact that they account for much, anything from 10 to 70 percent depending on how they are added up. Therefore, anything that adds to or subtracts from the total has to be important, e. g. if packaging is redesigned to allow one more box per pallet, the difference would be considerable.

Day suggests that the view that managers are resistant to change is untrue. It is not the change they resist, rather it is how change happens. When new initiatives or proposals are not adopted it is usually because something has gone wrong in the process. No director is going to refuse to consider a great idea that will make the company profitable on the grounds of resisting change. Logistics managers need to make senior managers care. This means understanding the current status and the impact that the proposed changes will have. Often, directors are only interested in a few issues (customers, competitors, costs) and developments in logistics should be seen in these terms. How, for example, will a new transport system improve customer relationships? Communication is important too; senior management will not be impressed with jargon; keep it simple. It is also important to remember that change and innovation involves risk. The goal is to minimize that risk in the eyes of management.

To sum up. You need the right people on your side; who are the decision makers? Who influences them? Make them part of your network. Devise a strategy to include those

who are not already included and to nurture those who are. Consider the key issues facing the board and note how logistics can respond to them. Ensure that proposals offer a strategic view that accounts for the way logistics touches the wider organization. Consider how the project can be eased into current operations and withdrawn if it does not work. Seek to reduce risk in terms of time, money and personal credibility. Finally, do not be afraid to give up if all else fails. There is a fine line between conviction and obsession; the success of all political ventures rests on timing.

Reading Materials

The First Step to Internet Marketing: Pick Something to Promote

Haven't done keyword marketing yet? Haven't done any Web marketing yet? No problem! Just follow these basic steps to get started.

Follow this orderly process, and you'll be able to start marketing your product or service on the Web in the next few days, at low cost and with (relatively) little trouble.

Step One: Pick Something to Promote

Broadly speaking, there are two categories of business that can benefit from keyword promotion: selling stuff; and collecting leads so you can sell stuff later.

Selling Stuff

Do you sell things that can be shipped, picked up, delivered electronically, or delivered as a service? As a test, pick a couple of items whose selling/customer patterns you know well. Preferably something that's easy and inexpensive to ship.

Impulse-purchase items are ideal, because in a few clicks, you might make a sale. They also tend to be easy to explain, and in some cases your keyword ad alone can provide enough info to capture a customer and generate a sale.

Considered-purchase products-complex sales with long selling cycles and a need for the personal touch-are tougher, but not out of the question. One interesting thing about the Web as a selling platform is that products that require or invite a lot of information-brochures, literature, background info, white papers, diagrams, photographs from every angle, live camera feeds, assembly and disassembly instructions, demos of the product in use-thrive on the Web.

Reason: People can sell themselves on your product. They may be uncomfortable being browbeaten by a salesperson, but customers will eagerly devour detailed specifications, product snapshots, and customer endorsements. You can even upsell them and increase your average selling price (ASP).

But start simple. Pick a product or service for which you'll easily be able to create the selling Web page. If you pick something that requires a complex set of interlocking Web pages, you may stall out at the next step. It also helps if the product is one for which you can easily think of several short, snappy, eye-catching selling points for your ads, because you don't get much space in those keyword text ads on the search sites.

Collecting Leads

Don't have a product or service that can be sold simply over the Internet? In that case, you should be collecting leads to promising customer prospects.

To get people to give you their E-mail address, or their name and postal address, you have to come up with some kind of offer.

The most common and successful offer is an E-mail newsletter containing useful info tidbits that will appeal most strongly to the kind of person you want as a customer. It might be something as simple as a promise to send them an E-mail alert when you're having a sale, a special offer, or a special event. It might be occasional expert advice from a staffer or an industry leader. How-to-use newsletters can be very effective for hands-on products like tools, hobbyist equipment, and software—even those who haven't bought yet will read the tips because it gives them insight into what it's like to actually use the product. Again, the customers sell themselves on your product.

Of course, you have to follow through by actually delivering periodic E-mail newsletters or E-mail announcements to satisfy the potential customers. This is actual work, so don't kid yourself. There's a whole subindustry devoted to creating and maintaining E-mail lists and appealing E-mail newsletters, so you can get lots of ideas and help. You also must offer subscribers an easy and reliable way to unsubscribe, or you'll never hear the end of it.

Info to Collect

You can get people to give you information that clearly relates directly to the offer. For an E-mail newsletter, you can get an E-mail address. If they're signing up to get you to mail something to them, you can persuade them to give you a postal address. But remember that every bit of additional info you ask will “dampen response”, as they say in the direct response biz—it will reduce the number of signups you get—and that's a Bad Thing.

And if you ask for info that you clearly don't need—if you make someone signing up for an E-mail newsletter give you a postal address or, worse, a phone number—you'll get some very interestingly far-fetched postal addresses and some highly nonfunctional phone numbers. The more you ask for, the more incentive you must offer in order to get it. Be careful not to let your judgement be clouded by the eagerness of your marketing or sales department for another tidbit of info so they can prequalify that lead. Remember, your customers simply won't torture themselves on your behalf.

Other Stuff You Can Achieve with Search Ads

In addition to selling and lead generation, ads can be used simply to raise awareness, though it's absolutely essential that your ad give the customer a strong reason to click.

(Remember, if nobody clicks on your ad, the search engines will drop the ad out of rotation!)

If you have a very local business, for example, you can use the ads to persuade the customers to walk in. If you're a restaurant or hair salon, buy ads on keywords people might use if they're looking for a restaurant or hairdresser in their area-like "Crescent City Diners".

In summary, for step one, you must pick something to advertise. Start simple in every dimension, from product to selling points to ease of handling.

Unit 6 EDI and Its Application

Text A Electronic Data Interchange (EDI)

Electronic Data Interchange (EDI) is used by organizations for transactions that occur on a regular basis to a pre-determined format. EDI is most commonly applied in the Execution and Settlement phases of the trade cycle. In execution of a simple trade exchange, the customer's order can be sent by EDI and the delivery notification from the supplier can also be electronic. For settlement the supplier can use EDI to send the invoice and the customer can finish the cycle with an electronic funds transfer via the bank and an EDI payment notification to the supplier. This whole cycle may be more complex and other electronic messages can be included. The cycle can be repeated many times, as often as the supermarket wants to buy cornflakes or the vehicle assembler needs new supplies of wheels.

EDI can be used for Pre-Sales transactions; there have been EDI messages developed for transactions such as contract but they are not widely implemented. Finding an appropriate trading partner and negotiating conditions of trade is likely to be undertaken by a member of staff in the buying department (or a manager on the golf course). The Pre-Sales phase could also involve the use of an electronic market. EDI could be used for after-sale transactions but only if they were in a standardized format and frequent enough to justify the system costs; transactions such as a dealer claiming payment for warrantee work could be a possible application.

EDI can also be used for standardized and repeated transactions that do not fall within the usual definition of trade exchanges. Examples are:

- In the UK, many National Health Service Dentists keep dental records on a computer system and treatment details are sent, by EDI, to the Dental Practice Board. The board then pays the dentists for its proportion of the treatment cost and again this transaction is electronic, using the national bank clearing system.
- British Telecom has also started using EDI. In this case for its bills from the gas, electricity and heating oil utilities. With 9,000 telephone exchanges computer centers and offices up and down the country it was processing about 120,000 bills a year from the various utilities. In 1996 it started a program of switching these invoices to EDI starting with the 250 bills from Scottish Power—the 250 bills, processed manually, took up two days work, much of which can be saved using EDI.

Both these applications of EDI facilitate the passing of data between the computer

applications of trading/co-operating organizations without the delays, inaccuracies and inefficiencies associated with the exchange of data on paper.

EDI Definition

EDI is often summed up as Paperless Trading. More formally EDI is defined, by the International Data Exchange Association (IDEA), as: The transfer of structured data, by agreed message standards, from one computer system to another, by electronic means.

This definition of EDI has four elements, each of them essential to an EDI system:

1. Structured Data

EDI transactions are composed of codes, values and (if necessary) short pieces of text; each element with a strictly defined purpose. For example, an order has codes for the customer and product and values such as quantity ordered.

2. Agreed Message Standards

The EDI transaction has to have a standard format. The standard is not just agreed between the trading partners but is a general standard agreed at national or international level. A Purchase Order will be one of a number of agreed message standards.

3. From One Computer System to Another

The EDI message sent is between two computer applications. There is no requirement for people to read the message or re-key it into a computer system. For example, the message is directly between the customer's Purchasing System and the supplier's Order Processing System.

4. By Electronic Means

Usually this is by data communications but the physical transfer of magnetic tape or floppy disc would be within the definition of EDI. Often networks specifically designed for EDI will be used.

The Benefits of EDI

EDI can bring a number of advantages to the organizations that use it. It should save considerable time on the exchange of business transactions and has the potential for considerable savings in costs.

EDI can be simply used to replace paper transactions with electronic transactions-this is the normal route taken in the initial installation of EDI. The full advantage of EDI is only realized when business practices are restructured to make full use of the potential of EDI; when EDI is used as an enabling technology to change the way the business operates-just-in-time (JIT) manufacture and quick response supply being prime examples of where EDI is used as an enabling technology to gain competitive advantage.

The direct advantages of EDI include;

1. Shortened Ordering Time

Paper orders have to be printed, enveloped and sent out by the customer's post room, passed through the postal service, received by the supplier's post room and input to the supplier's order processing system. To achieve all this, reliably, in under three days would be to do very well. EDI orders are sent straight into the network and the only delay is how often the supplier retrieves messages from the system. Orders can be in the supplier's system within a day, or if there is urgency the messages can be retrieved more frequently, for example every hour.

2. Cost Cutting

The use of EDI can cut costs. These include the costs of stationery and postage but these will probably be fully matched by the costs of running the EDI service. The principle saving from the use of EDI is the potential to save staff costs. The obvious example of this is that if the orders are directly input to the system there is no need for an order entry clerk. Note also that seasonal peaks, staff holidays, etc. no longer create a backlog in the order entry area. The cost savings need to be offset against the system development and network costs.

3. Elimination of Errors

Keying any information into a computer system is a source of errors and keying paper orders into the order processing system is no exception. EDI eliminates this source of errors. On the down side, there is no order entry clerk who might have spotted errors made by the customer, the customer will get what the customer asked for.

4. Fast Response

With paper orders it would be several days before the customer was informed of any supply difficulty, such as the product is out of stock. With EDI the customer can be informed straightaway giving time for an alternative product to be ordered or an alternative supplier to be used.

5. Accurate Invoicing

Just like orders, invoices can be sent electronically. EDI invoices have similar advantages to EDI orders in saved time and avoided errors. However, the major advantage in EDI invoices is that they can be automatically matched against the original order and cleared for payment without the sort of queries that arise when paper invoices are matched to orders.

6. EDI Payment

Payment can also be made by EDI. The EDI payment system can also generate an EDI payment advice that can be electronically matched against the relevant invoices, again

avoiding query and delay.

Indirect advantages of the use of EDI can include reduced stock holding, improvement of cash flow, business opportunities and customer lock-in.

To gain these advantages EDI has to be seen as an investment—there are costs upfront and the payback is longer term. The costs are the set up of the EDI system (hardware, software and network) and the time required to establish agreements with trading partners. The savings only start when there is a significant volume of business transacted using EDI, a point that is called the -critical mass-in the jargon of EDI.

New words

1. interchange [ˌɪntəˈtʃeɪndʒ] *v.* 相互交换
2. execution [ˌɛkʃiˈkjuːʃən] *n.* 实行, 完成, 执行
3. notification [ˌnəʊtɪfɪˈkeɪʃən] *n.* 通知, 布告, 告示
4. invoice [ˈɪnvɔɪs] *n.* 发票, 发货单, 货物
v. 开发票, 记清单
5. assembler [əˈseɪblə] *n.* 汇编程序
6. staff [stɑːf] *n.* 全体职员
v. 供给人员, 充当职员
7. involve [ɪnˈvɒlv] *v.* 包括, 笼罩, 潜心于, 使陷于
8. warrantee [ˌwɒrənˈtiː] *n.* [律]被保证人, 被担保人
9. inaccuracy [ɪnˈækjʊrəsi] *n.* 错误
10. inefficiency [ˌɪnɪˈfɪʃənsi] *n.* 无效率, 无能
11. floppy [ˈflɒpi] *a.* 懒散的, 邋遢的, 松软的
12. initial [ɪˈnɪʃəl] *a.* 最初的, 词首的, 初始的
13. retrieve [rɪˈtriːv] *v.* 重新得到
14. backlog [ˈbækləg] *n.* 大木材, 订货
15. elimination [ˌɪlɪmɪˈneɪʃən] *n.* 排除, 除去, 消除, 消灭
16. query [ˈkwɪəri] *n.* 质问, 询问, 怀疑, 疑问
v. 询问, 表示怀疑
17. upfront *adv.* 在前面, 在最前面
18. jargon [ˈdʒɑːgən] *n.* 行话

Notes about Terms

1. IDEA (International Data Exchange Association): 一定结构化的数据按照统一标准以电子化的形式在计算机之间进行传输。

2. EDI(Electronic Data Interchange): 电子数据交换, 是将业务文件按一个公认的标准从一台计算机传输到另一台计算机上去的电子传输方法。

3. Paperless Trading: 无纸贸易。由于 EDI 大大减少了纸张票据, 因此, 人们也形象地

称之为“无纸贸易”或“无纸交易”。

4. Structured Data:结构化数据。EDI 在传输数据时,先按照统一的标准,将数据转换成具有标准格式的结构化数据,然后再进行数据的传输。

5. Agreed Message Standard:统一信息标准。EDI 中还包括基础标准、代码标准、报文标准、单证标准、管理标准、应用标准、通信标准、安全保密标准等。

6. Purchase Order:订单。

7. JIT(just-in-time):即时的,零库存的,无库存的。

Exercises

I . Fill the blanks according to what you have learnt.

EDI is used by organizations for transactions that occur on a regular basis to a pre-determined format. EDI is most commonly applied in the 1 and 2 phases of the trade cycle. In execution of a simple trade exchange, the customer's 3 can be sent by EDI and the delivery 4 from the supplier can also be 5. For settlement the supplier can use EDI to send the 6 and the customer can finish the cycle with an electronic funds transfer via the 7 and an EDI payment notification to the supplier. This whole cycle may be more complex and other electronic messages can be included. The cycle can be 8 many times, as often as the supermarket wants to buy cornflakes or the vehicle assembler needs new supplies of wheels.

II . Translate the following sentences into Chinese.

1. Finding an appropriate trading partner and negotiating conditions of trade is likely to be undertaken by a member of staff in the buying department (or a manager on the golf course).

2. EDI can also be used for standardized and repeated transactions that do not fall within the usual definition of trade exchanges.

3. EDI is often summed up as Paperless Trading.

4. EDI transactions are composed of codes, values and (if necessary) short pieces of text.

5. The principle saving from the use of EDI is the potential to save staff costs.

III . Translate the following sentences into English.

1. 因特网是 C2B 以及 B2B 商务的一个新前沿领域。

2. 电子商务使得商品有可能以低廉、高效、简便的方式进行全球化销售。

3. 这些诚然为因特网商务打开门户奠定了基础,但仍然需要通过传统的方式进行商务活动。

4. 能够网上进行订购,支付对于国际贸易是一种革新。

5. 本质上讲,电子商务是全球化的,因此因特网只会大幅度提升国际贸易。

IV . Answer the following questions.

1. Use your own words to explain what EDI is and its four elements.

2. What are the advantages of EDI and how can they be realized?

Text B EDI Adoption and EDI Maturity

1. Business System Evolution

The development of business computer systems has essentially taken place over the last 30 years. Initially, the commercial use of computers was limited to mainframe computers, the main administrative processes and to large organizations. The development of mini and micro computers allowed the adoption of information technology by medium and small size enterprises and, in many organizations, there is now a computer on every desktop.

The marriage of computers and telecommunications has enabled organizations to network their computers. Offices have local area networks linking one desktop to another, to a server and / or a central computer. Geographically dispersed organizations have wide area networks linking their locations and systems together, throughout the country and / or across the world. Many organizations have used these networks to interface or integrate their business processes with common customer files, interfaces to the accounting system and the like. At the simplest level this is achieved by numerous interface transactions but it can also involve the set-up of the corporate database or distributed databases on networked and client server systems. The integration of systems has been a factor in improving customer service and customer care, it has also given birth to new products and services, particularly in the financial services industry.

However, this integration of computer systems stopped at the companies front (and back) doors. Inside the company, for example, the order processing system formulated the replenishment demand, updated the stock file and made a posting to the accounting system but then printed the order on paper. The paper order was then posted to the supplier where it would be typed into their order processing system with the inevitable quota of delays, transcription errors and coffee stained documents. It is calculated that, for a typical company, 70% of the documents they type into their system will have been printed out from another computer system and, of these documents, 50% will be input with mistakes in the transcription.

The answer to these difficulties and inefficiencies is the Inter-organizational System (IOS). The prime technology of the IOS is EDI. The development of EDI and IOS systems is, arguably, a new generation of computer application that has changed inter-organization business practices in much the same way as the evolution of IT and IS has radically changed Intra-organizational procedures.

These developments of business information systems can be represented as three stages or three generations, see Figure 1. The development of Internet enabled systems is arguably the next stage in this evolution.

2. EDI Maturity

EDI development, it is suggested, follows a fairly standard pattern. This can be represented as a six stage maturity model, see Figure 2.

The stages of the model and some of the opportunities and implications of each stage are;

- **Discovery Stage**

The first stage in EDI development is the discovery stage. Discovery can be by an organization choosing to adopt EDI to gain competitive advantage or to solve an administrative problem. Often it arises from the realization that competitors are adopting EDI and that being left behind will result in competitive disadvantage. For most EDI users discovery has come in the form of a “request” from a significant customer organization that is converting its trade transactions to EDI—such “requests” are not necessarily negotiable.

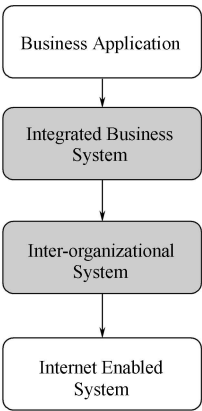


Figure 1 Generations of Business Information System

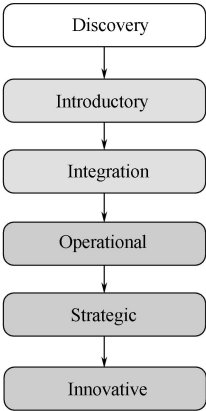


Figure 2 EDI Maturity Model

- **Introductory Stage**

Organizations setting out on the EDI path generally start with a pilot scheme. Initiators of EDI trading networks will choose one or two trading partners with which to pilot a single message (transaction) type. Organizations which are forced into EDI trading by an insistent partner start electronic trading in a similar way. This stage can be termed the introductory stage. This stage requires investment—there are direct costs in computer hardware and software but at least as significant will be the time commitment in establishing the parameters of the electronic trading relationship. This stage, on its own, does not result in any cost saving or efficiency gain.

- **Integration Stage**

Having found out about EDI and having gained some practical experience the system can be developed further. Very probably the introductory system was a free standing system with transactions being transcribed from the EDI system to the main business system (or visa versa depending on the selected message type). There is little benefit in an EDI system if, for example, orders have to be printed out and typed back into the order processing system. The next stage therefore is to interface the EDI software with the business application so that EDI messages can be transferred electronically and automatically between the two systems. This stage is referred to as the integration stage. The work involved in this stage is very variable but is often expensive. To establish the

EDI service EDI software can be bought off-the-shelf. Integrating the EDI software and the business system will very often require writing an in-house interface system. The EDI software will provide interface file formatting facilities but is not likely to be able to match the validation and integrity checks that a business system would normally apply to data input. Integration is an essential stage for the large user of EDI. Many small organizations, often forced into EDI by a large trading partner, never achieve integration.

- **Operational Stage**

Integration realizes the EDI benefits of saving time and avoiding transcription errors. Real business benefits only come when a significant number of trading partners and / or commonly used trade transactions are converted to EDI. Reaching a ‘critical mass’ in the volume of electronic trading gives cost savings—the staff dealing with manual transactions can be redeployed. The conversion of the major part of the trade cycle, both in volume of trading partners and in numbers of message types is the operational stage. Different organizations have placed differing emphasis on the completion of the operation stage. Large retailers have been keen to convert all their suppliers to EDI orders but there has been less emphasis on electronic invoicing and payment. The vehicle assemblers, however, tend to be more advanced in implementing other message types. Completing the electronic trade cycle speeds up business transactions and gives the opportunity to look at the organization of the trade cycle and the supply chain.

- **Strategic Stage**

There are savings to be made by simply replacing paper documents by their electronic equivalent. The real opportunities come from making changes to established business practice. These opportunities only arise when significant progress is made in the operational stage-the implementation of these changes is the strategic stage. Possible areas of change and examples of where such changes have taken place are:

The sequence of trade documents can be revised. Document matching is a considerable problem in order processing; the customers have to match deliveries to the orders and invoices to the deliveries; the suppliers have to match payments, to invoices-each process made more complex by disparate document types, part deliveries and incorrectly recorded codes. EDI makes the process easier-at the very least codes should be correct and in the proper place. The use of EDI has allowed companies to disband their order processing and invoice matching sections with large staff savings reported by the major EDI users. EDI also gives the opportunity to re-engineer the trade document cycle; self invoicing having been adopted by a number of major organizations.

EDI can give dramatic time-saving. The time between formulating a replenishment demand to the order being processed by the supplier can be as short as is required-for all orders, not just rushed orders. This has facilitated the reduction or elimination of stock holding (by the customer organization at least) and is a part of the development of just-in-time (JIT) manufacture and quick response supply.

- **Innovative Stage**

The establishment of an operational EDI infrastructure and the change of operational

procedures that it facilitates also give the possibility of changing the nature of the product or the provision of new services. These developments are termed the innovation stage in the model and it is contended that they open up new possibilities for competitive advantage. Examples of such developments are emerging as the early users of EDI achieve maturity in their systems.

A number of moves to product customization rely on a mature EDI infrastructure. For example, Levi Jeans, if you are female and live in the US, will produce a factory made to measure pair of jeans. The measurements are taken in the store and submitted electronically to the centre.

Further moves to exploit a mature EDI infrastructure in an innovative way should be expected. A sector where the linking of EPOS and EDI is set to change the market is that of the best seller' book trade. Timely market intelligence can allow reprints of successful blockbusters to be rushed out before the stock disappears and the public interest is lost.

Reading Materials

Ten Key Steps to Successfully Marketing Your Business Online

More and more small businesses find it essential to market their products and services online. Customers are increasingly turning to the Web to research companies, compare product features and prices, and to purchase online. A company that does not take advantage of the Web and E-mail to market their business can lose valuable customers.

It has never been easier or more cost-effective to market online. There are numerous Web sites, consultants, software packages, and other tools to help you implement a successful online presence.

Here are 10 key steps to successfully market your business online:

1. Obtain a Good Domain Name.

Before you establish a Web site for your business, you need a domain name. A domain name is the Internet address that allows computer users to find your Web site, such as [www. Microsoft. com](http://www.Microsoft.com) or [www. BananaRepublic. com](http://www.BananaRepublic.com). Good domain names are difficult to obtain, as millions have already been purchased over the years. The most common domain names end in “.com” or “.net” and are the most desirable.

It's easy to check whether a domain name is available. For example, [Yahoo. com](http://Yahoo.com) has a domain name service check and you can do a check in under a minute. The cost on Yahoo to purchase a domain name is under \$10.

A few key tips on domain names:

- Make sure that the domain name hasn't been trademarked by someone else;
- Make sure it's easy to spell;
- Pick a name that is easy to remember. Simple and descriptive is better—you don't have to come up with something as catchy as “Google”—as non-descriptive names require more branding effort.

2. Build a Professional Looking Web Site

Your Web site is a reflection of your business. People who come to your Web site will be impressed or turned off by the level of professionalism of your site. There are several approaches to building a Web site.

- First, there are plenty of sites, including, that will give you Web site templates either for free or very cheaply.
- Second, there are professional site building consultants who will custom-build a site for you. But see our to see what you need to do to negotiate a contract with such a consultant.
- Third, there are multiple software packages available to help you build your own site.

3. Make Your Web Site Easy to Navigate

Don't get caught up in trying to come up with dazzling flash and color for your site. The key to a good site is to make sure that the viewers can easily find what they want. Your product should be simply and clearly displayed, and purchase should be easy. This means a clear navigation bar and a good "search" box. Review some of your favorite sites as well as competitors' sites. That can help you plan how your site should be designed.

4. Build up Your E-mail List

E-mail marketing is one of the best and cheapest ways to sell online. It's a great way to communicate with customers and prospective customers. So it is very valuable to collect E-mail addresses from visitors to your Web site. Offer them something worthwhile for their E-mail address—such as a discount or a free newsletter.

Make it easy to get someone's E-mail address, but also be sure that you have set forth a Privacy Policy on your site describing how you will use any personal information. And be sure that you are up-to-date on the laws affecting E-mail marketing.

5. Send Periodic E-mail Newsletters

E-mail newsletters can prove to be effective communication tools for existing customers, prospective customers, and other key audiences. Here are 5 hallmarks of effective E-mail newsletter programs:

- Keep it reasonably short. Nobody wants to read lengthy E-mails.
- Make it well designed and visually interesting. Include photos and graphics. Provide multiple links back to your Web site.
- Be professional; avoid typos, a sloppy look, and broken links.
- Include an easy way for the viewer to contact you and to unsubscribe from your E-mail list.
- Constantly test and track the progress and effectiveness of your newsletters.

E-mail newsletter programs can be established through companies that provide turn-key solutions.

6. Buy Banner Ads

You can enhance visibility and traffic to your site by buying banner ads. The keys to effective banner ad campaigns are:

- Make the ad visually interesting with links to a particular offer or "landing" page on your site.
- Place the ads on sites relevant to your business.

Constantly monitor and test the efficacy of the ads. Measure click-throughs from the ad to your site and resulting sales and return on investment ("ROI").

7. Optimize Your Site for Search Engines

Hundreds of millions of searches a day are performed on the Web through Google, Yahoo, and other search engines. The search engines “spider” billions of Web pages. There is a fast-growing tool called “search engine optimization” that refers to efforts to raise your Web site’s ranking in search results.

8. Buy Keyword Ads on Search Engines

Many businesses find that key word advertising on search engines is quite beneficial. Here’s how it works: If you sell computer books from your Web site, you might buy a small ad or listing on Google that pops up when someone types in the search box a term that you designate, such as “computer books” or “PC books”. If the searcher sees your paid ad and clicks on it, he is transported to your Web site and you pay on a cost per click, or “CPC”, basis to Google, such as 30 a click. The goal is to bring qualified prospective customers to your site.

To garner the most success from key word ad buying programs:

- Purchase the most relevant key words.
- Write ads that will compel qualified buyers to click on the ad.
- The ad should lead to a page on your site that sets forth the precise product or service related to the keyword. Sending a viewer to your home page is generally not as effective as sending them to a specific product page.
- Constantly review the amount you pay per click and the conversion of that click into buyers.
- Test different ad copy and different landing pages to determine what works best for your site.

9. Make it Easy to Buy

If you sell products from your site, you will need a shopping cart system and a credit card authorization process. Many companies provide such systems off the shelf, such as Yahoo! Small Business. The key here is to make sure that the shopping process is fast and efficient. Many Web sites whose checkout process was too cumbersome lost potential buyers who became frustrated with the amount of time and effort involved.

10. Provide Great Customer Service

A satisfied customer will return to your site. So go out of your way to offer great customer support and service. To those customers who are not happy with their experience, try to turn them around with an a discount, a free product, or some other benefit.

Unit 7 Electronic Marketing Structure and Direct Marketing

Text A Overview of Electronic Marketing Structure

1. Amazon's Competitive Structure

Competition selling books online is growing rapidly, with companies aiming at niche markets (such as old books, technical books, children's books, and price comparison). The global cyber book market is expected to grow to \$1.1 billion by 2000. Consider the famous cyber-bookstore Amazon at www.amazon.com. We can investigate the competition structure of the cyber book market by comparing the strength and weakness of Amazon with its competitors. For this purpose, Barnes & Noble is selected as a key competitor.

Amazon is the largest cyber-bookstore in the world, with 50 percent of the cyber book market share. Amazon was opened in July 1995, and it sold \$15.7 million in 1996. Its sales climbed to \$600 million in 1998, with an astonishing monthly (not annual) growth rate of 34 percent. Amazon listed more than 10 million titles in its electronic catalog in spring 2000, although it actually keeps an inventory of only few thousand high-selling titles in its own warehouse. The other ordered titles are forwarded to the wholesaler Ingram, and FedEx delivers the merchandise to customers. In 1996, Amazon's annual turnover rate of its own inventory was 42, in contrast to 2.1 for Barnes & Noble, who sold books at physical stores. According to our survey performed during summer 1998, both Amazon.com and barnesandnoble.com sold books approximately 14.2 percent cheaper than what traditional bookstores charge. In spite of its loss of \$27 million in 1997, Amazon's stock value has risen significantly, hitting \$200 per share in January 1999.

Amazon carries 23 categories of books that can be found by clicking "Browse books by subject" (visit Amazon's home page). To assist in finding books, Amazon provides not only a subject directory but also a keyword search engine, as most large electronic shopping malls do. In addition, Amazon provides information about bestsellers, related books for contextual selling, and critiques about many books in the "Hot This Week" corner. It takes about 3 to 7 business days to deliver in the United States, and 4 to 10 weeks abroad. Customers pay the shipping; for the standard U. S. domestic shipments, the charge is \$3.00 per shipment plus \$0.95 per book. After gaining a reputation as the cyber-bookstore, Amazon expanded its offerings to music, video, gifts, and auction.

The largest retail bookstore chain, Barnes & Noble (www.barnesandnoble.com), started a counterattack in cyberspace in 1997 with the cooperation of Lycos search engine,

and it has quickly reached 15 percent of cyber book market share. The strength of Barnes & Noble is its high profit margin of 36 percent (Amazon's margin is 22 percent). In contrast with Amazon's losses, Barnes & Noble had \$51 million in profits in 1997—when you combine traditional store and the cyber-bookstore's earnings. Recently, barnesandnoble.com opened an online bookstore for the business market. Barnes & Noble has also acquired Ingram.

Managerial concern in this situation is who can be the most competitive eventually? Is the cooperating model of Amazon and Ingram more effective than the cyber book-retailing channel barnesandnoble.com (www.bn.com) with the traditional nationwide bookstore network? New competitors to both Amazon and Barnes & Noble are BestBookBuys.com, which compares the prices of 18 competitive cyber-book-stores including Amazon and Barnes & Noble, and Buy.com, which sells books at the lowest price. What can be the critical success factors for winning the market?

2. Overview of Electronic Marketing Structure

Amazon's case has demonstrated a competitive structure of electronic retailers. We can understand the competitive structures of the electronic market from various angles. Electronic marketing can be classified as consumer-oriented (B2C) and business-oriented electronic marketing (B2B). Consumer-oriented electronic marketing is also growing offline, mainly using smart cards, although it is still experimental. There are many common features between consumer-oriented and business-oriented marketing. For instance, the cyber-bookstore Amazon can be used not only by a private consumer but also by a business's acquisition department. Indeed, Amazon's chief rival, Barnes & Noble, has opened a special division that caters only to business customers. Wal-Mart Online sells to both individuals and businesses (via their Sam's Club). Dell sells their computers to both consumers and businesses. Under the seller-centered electronic mall architecture, there are only minor difference in dealing with individual consumers and businesses.

However, with the high volume of transaction and large amount payments, business purchases do need more precise record keeping, trackability, accountability, and formal contracts.

By using the Internet, manufacturers can directly contact customers without using intermediaries. The manufacturer's direct marketing can be realized as long as they sell established brands and their home site is well known, as is the case with Dell Computer. Later we will describe how Dell was able to succeed and why other PC makers were not able to duplicate their success.

If a manufacturer's site does not have high visibility, just opening a home page and passively waiting for customers' access may not contribute greatly to sales. Therefore, it is necessary for companies to heavily advertise their Web sites' address. Any cost-effective advertisement method can be employed for this purpose. One example is to link the site to well known electronic directories, and most manufacturers use the directory service of

intermediaries. These intermediary sites are called electronic shopping malls (or E-mails). We can observe two types of electronic shopping malls: electronic distributors and electronic brokers (e-broker). If the E-mail takes responsibility for order fulfillment, it is an electronic distributor—for example, Amazon and JCPenney Online. In contrast, electronic brokers only help the search process—for example, Choice Mall. The actual order is forwarded to a manufacturer or distributor.

At least during the initial EC stage, established distributors like department stores and discount stores were not the major players in electronic retailing. The traditional distributors used their home pages and electronic catalogs to attract customers to the physical stores, although large distributors like Wal-Mart and JCPenney take orders over the Internet as well. Therefore, we need to study the competition structure of electronic distributors, brokers, and online department stores.

Initially, the main concern for electronic marketing involved securing technologies necessary to implement Internet-based marketing, such as powerful search capability and secure electronic payment. However, today the main concern of management is shifting to how to utilize the opportunity of Internet-based marketing to enhance competitiveness in harmony with existing marketing channels. So we need to examine the use of the conceptually new electronic business models.

New Words

1. niche [ˈniʃ] *n.* 小生境, (比喻) 市场地位
2. Ingram [ˈɪŋɡrəm] *n.* 英格拉姆 (一家美国物流公司)
3. turnover [ˈtɜːnəʊvə] *n.* 流通量, 营业额, 周转
4. contextual [kənˈtekstʃuəl] *a.* 前后关系的
5. counterattack [ˈkauntəˌrætæk] *n.* 反击, 反攻
v. 反攻, 反击
6. critical [ˈkɪtɪkəl] *a.* 评论的, 鉴定的, 批评的, 危急的, 临界的
7. demonstrate [ˈdemənstreɪt] *v.* 示范, 证明, 论证
8. acquisition [ˌækwɪˈzɪʃən] *n.* 获得, 获得物
9. minor [ˈmaɪnə] *n.* 未成年人, 副修科目
a. 较小的, 次要的, 二流的, 未成年的
10. trackability [ˌtrækəˈbɪlɪti] *n.* 可追踪性
11. intermediary [ˌɪntəˈmɪːdiəri] *n.* 仲裁者, 调解者, 中间物
a. 中间的, 媒介的
12. duplicate [ˈdjuːplɪkɪt] *a.* 复制的, 副的, 两重的, 两倍的, 完全相同
n. 复制品, 副本
v. 复写, 复制, 使加倍, 使成双

13. cost-effective *a.* 有成本效益的, 划算的
14. forward ['fɔ:wəd] *a.* 早的, 迅速的, 前进的
v. 转寄, 促进, 运送
15. harmony ['hɑ:məni] *n.* 协调, 融洽

Notes about Terms

FedEx: Federal Express (美国)联邦快运。

Notes about Sentences

1. consumer-oriented (B2C): 消费者导向的, 面向消费者的
2. electronic distributors and electronic brokers: 电子经销商和电子经纪人
3. The traditional distributors used their home pages and electronic catalogs to attract customers to the physical stores, although large distributors like Wal-Mart and JCPenney take orders over the Internet as well.

尽管大经销商像沃尔玛和 JCPenney 在互联网上接受订单, 但传统经销商却使用他们的主页和电子目录吸引顾客对其物理商店的注意力。

4. According to our survey performed during summer 1998, both Amazon.com and barnesandnoble.com sold books approximately 14.2 percent cheaper than what traditional bookstores charge. In spite of its loss of \$27 million in 1997, Amazon's stock value has risen significantly, hitting \$200 per share in January 1999.

根据我们在 1998 年夏季的调查, Amazon.com 和 barnesandnoble.com 销售书籍大约比传统书店便宜 14.2%。尽管在 1997 年它损失了 2700 万美元, 但亚马逊的股价却显著上升, 1999 年 1 月每股达到 200 美元。

Exercises

I. Fill in the blanks according to the text.

Companies today operate under increasing business environment pressures. The major _____ 1 _____ are labeled the 3Cs: competition, customers, and change. The customers are treated like royalty, as companies try to lure them to buy their goods and _____ 2 _____. Finding and retaining customers is becoming the major critical _____ 3 _____ factor of most businesses.

Electronic Commerce consumers can be _____ 4 _____ into two types: individual consumers, who get much of the media attention, and organizational buyers, who do most of the shopping in cyberspace. _____ 5 _____ buyers include governments, private corporations, resellers, and public organizations. Organizational buyers' purchases are not intended for personal _____ 6 _____. Rather, products or services they buy are generally used to create other products (services) by _____ 7 _____ value to the products. Also, products may be purchased for resale without any further modifications.

Consumers can be _____ 8 _____ into three types: Impulsive buyers, who purchase products quickly; patient buyers, who purchase products after making some _____ 9 _____; and analytical buyers, who do substantial research before making the decision to purchase products or services. Also, there are window shoppers, who just _____ 10 _____.

II. Translate the following sentences into English.

1. 我们可以通过比较亚马逊公司及其竞争者的优缺点来研究网上书店的竞争结构。
2. 作为网上书店赢得名声以后,亚马逊将其业务范围扩展到音乐、影像、礼物和拍卖。
3. 什么才是赢得市场的关键成功因素呢?
4. 通过互联网,厂商可以不通过中间商直接和消费者接触。
5. 公司大力宣传他们的网址是很有必要的。

III. Translate the following sentences into Chinese.

1. To assist in finding books, Amazon provides not only a subject directory but also a keyword search engine, as most large electronic shopping malls do.
2. Managerial concern in this situation is who can be the most competitive eventually?
3. Amazon's case has demonstrated a competitive structure of electronic retailers.
4. If a manufacturer's site does not have high visibility, just opening a home page and passively waiting for customers' access may not contribute greatly to sales.
5. Initially, the main concern for electronic marketing involved securing technologies necessary to implement Internet-based marketing.

IV. Answer the following questions.

1. Introduce Amazon and its services briefly according to the text. Make some comments on its services.
2. How can we understand the electronic marketing structure?

Text B Direct Marketing

As an example of a proactive and full direct marketing model, let us investigate the case of Dell Computer Corporation. The readers need to understand how Dell can sell close to \$15 million per day (1999) on the Internet, while other computer makers cannot easily duplicate Dell's success. Because Dell sells its products to both consumers and business, this case can also be used for B2B EC, as a contrasting example of reactive and partial direct marketing, we examine the Ford case.

1. Proactive and Full Direct Marketing: the Dell Computer Case

Founding Spirit of Dell: Telemarketing

Headquartered in Round Rock, Texas, Dell Computer Corporation was founded in 1984 when Michael Dell pioneered the idea of selling custom-built computers through the mail directly to customers. Telemarketing has been the major business strategy since the birth of the company. Therefore, with the emergence of the Internet, it was natural to

consider using it as a direct marketing channel. The results were astonishing. By 1998, Dell had become the largest manufacturer and marketer of business PCs in the world, and in 1999 the first for the entire PC market. It has been growing the fastest among all major computer systems makers worldwide. Dell sells computers in more than 170 countries.

Astonishingly High Growth and Return

Net revenue of Dell for fiscal year 1998 had increased to \$18.2 billion, a 48 percent rise from 1997 and four times the industry rate. Net income had risen 82 percent, and the return on invested capital was 186 percent for the year. The stock price had risen more than 1,000 percent during the past two and a half years and recorded the largest share-price gain in the industry. What could make these records possible? The Internet? This is partially true. It is important, however, to observe the factors behind its Internet-based home page.

Revenue via the Internet

In July 1996, Dell launched Internet-based online sales and services at www.dell.com. In Fall 1999, Dell sold \$15 million per day through the Internet and Internet sales have reached about 27 percent of total revenue. In the near future Dell expects to see 50 percent of its sales over the Internet.

Dell's Products on the Internet

Dell sells all the items it produces on the Internet: desktops, workstations, notebooks, network servers and storage devices, software, and add-ons (e. g. , zip drive, printer, Microsoft Plus! 98). Those items are also sold by telephone, fax, and mail, implying that the call center service can complement the Internet home page. Service, support, and introduction to the company are also prepared on the home page.

Dell's Critical Success Factors

Dell's success story is very impressive, so competitors must have a desire to imitate Dell's strategy. But why is it so hard to copy? We can observe six reasons:

- Advanced Web applications. Dell was the first Web-based computer seller and has the best connection, from the end consumers all the way back through the supply chain. Dell uses the Web thoroughly and creatively. Dell allows business buyers to download Premier Pages, which enable customers to configure what information their employees can see, and even which employees can see it.
- Price competitiveness owing to mass customization. Direct marketing to small consumers as well as corporate buyers means the manufacturing system should be adaptive to the small orders in a make-to-order fashion. To keep the price competitive without longer delivery time, efficient procurement of small numbers of parts from vendors, flexible manufacturing systems, and economical distribution to customers are a must.

Recall that Dell Computer was born with the spirit of telemarketing, and the Internet is just another excellent medium of contacting distant customers interactively. There was

no need for Dell to change business strategy to adopt Internet commerce. However, for other companies, this may not be the case. Changing the business strategy fundamentally may be very difficult expensive, and time-consuming.

- Database marketing and customer intimacy. Dell's direct relationship with all of its customers makes one-to-one database marketing possible. Dell can learn about its customers by watching how they use the Web site. For this purpose, the database, as well as the tools for data mining such as statistical analysis, inductive learning, and neural network modeling, are used to classify customer segments. This is essential for focusing on and deepening the personalized relationship. This can be used for advertisement and customer services as well.
- Global reach and value-added services at a single contact point. Dell has more than 10,000 service providers around the world who provide technology planning and acquisition, system deployment, network, and product maintenance. The Internet can provide an efficient single point of contact for these services backed by corporate-level accountability for their products and services. The Internet makes it easier and reduces costs for customers to do business with Dell. Because the customers spend their own time to obtain the service from the Internet, which required human agents in the call center previously; the Internet also reduces Dell's cost. The Internet can be used effectively to enhance relationships with suppliers as well as customers.
- High reliability and reputation. If the products do not have high reliability, customers will hesitate to order the items without a trial. Dell was well prepared in this regard. Dell's products OptiPlex and Dell Dimension Desktop computer, have garnered an unprecedented 174 awards for performance, reliability, and service. Dell's customers do not worry about the reliability of the Dell brand.
- Delivery support. An inherent disadvantage of telemarketing is the relatively longer lead time needed for delivery. To overcome this deficiency, Dell provides the estimated delivery time as well as online order tracking information for each order. When the product inventory and/or parts are available, Dell can deliver a simple configuration in 2-3 days, average in 5 days, and complex in 7-10 days. However, if the parts are not readily available, the lead time is estimated and the customer is informed.

We have seen how Dell became successful, and why it is not easy for other manufacturers to duplicate the success. Nevertheless, no major manufacturers can neglect the opportunity of direct marketing. Managerial concern is the degree of strategic change. In this process, the ultimate measure will be the economics of EC. Is the benefit of EC bigger than its implementation cost?

Major benefits include increased revenue, enhanced consumer goodwill owing to the online service and support, and reduced operating costs for distribution and purchasing.

Benefits will be relative to the initial business position of each company and its possibility of changing business structure toward telemarketing and make-to-order systems.

Basic costs of implementing EC include home page system development and maintenance, server and network acquisition and operation, merchandising, order fulfillment, collection of payment, and optional call center operation. However, a more fundamental cost can be incurred when management commits to change the way of doing business, such as changing the major distribution channels and manufacturing systems.

2. Reactive and Partial Direct Marketing: Ford Case

In contrast with proactive and full direct marketers, who fully commit to direct marketing, other companies, which we call reactive and partial direct marketers, sell their products mainly through traditional channels like dealers, department stores, discount stores, and franchises; however, they also open online factory outlets on the Internet. Most computer makers belong to this category. We foresee that all major manufacturers will adopt either a proactive or reactive direct marketing strategy in the near future.

Here, we investigate the Ford case as an example of reactive and partial direct marketing. Ford, like other automakers, could not switch its distribution channel to the Internet overnight. So it opened its e-store as an additional distribution channel.

Ford Case

The benefit of ordering online is bypassing dealers, thereby reducing the selling price and/or increasing profit. However, automakers cannot completely eliminate dealers because many customers do not have access to the Internet or do not want to shop online. Under such a circumstance, including dealers as partners is an optimal arrangement because orders that are received directly by the automakers cannot be physically fulfilled without the cooperation of dealers. An order received can then be assigned to the nearest dealer that has the desired car in its inventory. For such cooperation, dealers' inventories should be shared by automakers through a common network like the ANX extranet.

Ford's Reactive Direct Marketing Model

Ford implemented a variation of the reactive direct marketing (refer to www.ford.com). To order a new car online, you need to select the brand, body style, option package, exterior paint color, and interior upholstery. Then the Online Shopping System provides you with a Vehicle Summary, including a suggested retail price. You can change options to accommodate your budget and finalize the configuration. Next, you decide whether to lease or buy with the aid of the Payment Calculator System. Ford searches for a nearby dealer and sends the Vehicle Summary to the dealer. The dealer will contact you with a price and availability of the vehicle you configured. Here you have a chance to negotiate.

In the current procedure, the information about which dealer keeps inventory that meets the required configuration is not available to the buyer. In this sense, the current

system is a semiautomatic support. In the future, the buyer will have such information as well as an estimated time for preparing a customized car not available in stock.

Ford also supports a Preowned Showroom (www.fordpreowned.com). To buy a used car online, you need to enter the zip code and search the inventory. By entering your personal information, you can reserve your vehicle and select a dealership for test drive and delivery. The rest of the process is the same as the current purchasing procedure.

In both of these Ford business models, we can see that the dealers are not targeted for elimination but are partners who are cooperating in a new sales procedure as a result of the Internet. It is reported that only 2 percent of 15 million new vehicle sales and 33 million used vehicle sales were consummated over the Internet in 1997. But it is predicted that 25 percent of all car sales in the United States in 2000 will be initiated online.

Some car manufacturers, like Toyota and Daewoo, are considering the possibility of eliminating the dealers and offering all service, including financing, on the Internet. They will also consider coming to your home for the test drive.

Reading Materials

Internet Marketing and Customer Referrals

1. The Impact of Internet Marketing

Internet marketing is a business imperative because the Internet is an irrevocable and unstoppable trend. Even if you have a traditional “brick-and-mortar” business, you’ll lose valuable customers without an online presence. People routinely search for goods and services with their computers in lieu of the yellow pages. If your business isn’t on the Web, customers will likely choose another company with whom to do business.

Also, online advertising is cheap. Advertising in the phone book or a newspaper is expensive, especially if you want an ad that has a presence on the page. An ad in an Internet directory is generally free, and you can include links directing customers to your Web site for more information. And because you can provide customers with a wealth of information, they no longer have to pick up the phone to have their questions answered.

Although you don’t need a Web site to register your site in an online directory, your marketing efforts will be much more effective if you have your own site. The first thing to do is to register a domain name. The name of your business is usually a good place to start, because it can help to build your brand and will be easy for customers to remember. If that’s not available, you may have to settle for another name. Before you commit, give your domain name serious consideration; the name you choose will be your company’s online identity for years to come.

Once you choose your domain name, you’ll need to build a professional Web site. You can use templates provided by your Web host, hire a Web designer to develop your site, or use software to design it yourself.

The difficult part is to rise above the crowd and differentiate yourself from your competition. This is where a well thought out Internet marketing plan can help. Here are the main components of any good online marketing plan:

- Registering your site with search engines and directories
- Optimizing your site for search engines
- Sponsoring search engine keywords
- Building a database of customer E-mail addresses
- Sending E-mail newsletters
- Buying online ads

For specifics on these marketing methods, check the AllBusiness.com Sales & Marketing Center and Internet & E-Commerce Center.

2. Significance of Customer Referrals

In online marketing, as in traditional marketing, customer referrals are the goal. Your business will succeed to the degree that your customers refer you to other customers.

Attracting new customers to your business is expensive and time-consuming. If you let your customers do the marketing for you, you can concentrate your time and money on one of the countless other projects on your to-do list.

And the Internet allows you to promote your business to customers while at the same time making it easy for them to recommend your business to their friends, family, and colleagues. Here are a few time-tested solutions.

E-mail newsletters. Including useful content and valuable incentives in your E-mail newsletters will encourage customers to forward your newsletter to potential customers.

Promotions. Two-for-one deals or friends-and-family discounts can encourage current customers to bring new clients to your business.

Unique Web site features. If you're promoting your services as a nutritionist, for instance, include a calorie calculator on your site. Customers who find the calculator useful can easily forward a link to friends and promote this feature.

"E-mail a friend" feature. This makes it easy for site visitors to E-mail content or information to other interested people. The fewer hurdles you provide to customers, the more success you'll enjoy.

Unit 8 SCM and Electronic Commerce

Text A IT and Supply-Chain Management

Many global manufacturing companies are involved in implementing new information systems and technology for supply-chain management. Initial applications include financial systems, production planning, distribution and inventory management systems. Most will take four-to-five years to implement and cost millions of dollars in direct expenses. When asked about the impact of these projects, managers usually say their companies will be more customer-responsive, more cost-effective and better able to share consistent and accurate information across functions. Although this long-term view of investments in IS and IT sounds reasonable, managers need to ask whether these approaches are appropriate says Donald Marchand, professor of information management and strategy at IMD in Lausanne, Switzerland.

Most companies are beginning to face “hyper-competition”, where firms position themselves against one another in an aggressive fashion, as opposed to moderate competition where firms are positioned “around” each other. With moderate competition, barriers are used to limit new entrants and sustainable advantage is possible so long as industry leaders cooperate to restrain competitive behavior. However, hyper-competitive firms (where customer loyalty is challenged continuously and where organizations must transform their capabilities and processes to match or exceed those of competitors) are constantly seeking to disrupt the competitive advantage of industry leaders and create new opportunities.

In hyper-competitive markets, the pursuit of four-to-five-year reengineering application software and database projects is questionable, as firms are continually changing their strategic capabilities in small 6-12-month increments; short-term changes which permit new bases for profitability and growth. These modular and flexible changes in processes, information management and application systems not only allow more rapid and flexible implementations, but also enable firms to “undo” or “unlearn” approaches which no longer offer competitive potential.

The operational focus of supply-chain management projects may also be at issue in moderate versus hyper-competitive markets. In the former, investing in upstream projects (new financial systems, production planning or inventory management systems) may offer substantial benefits, including consistent information sharing and improved cross-functional cooperation. In hypercompetitive conditions, the focus needs to be on process and information systems with high return-on-investment and added customer value. The

operational focus will shift to the demand side and emphasize customer interaction, account management, after-sales service and order processing. To sustain competitive advantage in hyper-competition, a firm may seek to eliminate the need for detailed management reporting and controls, or market forecasts and production plans. Instead, a firm can substitute real-time, online product movement information from its dealers and retailers or simplify controls and management reporting by delivering the organization and empowering employees to improve process quality continuously.

In addition to selecting the right processes and information flows to automate, managers must also consider the impact of the ways in which they are automated. The trade-offs and choices related to information management, IS and IT are different under conditions of moderate versus hyper-competition. In moderate competition the focus is usually on achieving consistent data definitions among disparate functions and removing unnecessary costs of paper handling, inefficient software applications and labor. Supply-chain management improvements are directed at making the supply-chain relationship faster and more consistent, and lowering the cost of working capital by using inventory as the buffer of the last rather than the first resort. In hyper-competition, the focus is on creating value primarily by improving information use and quality in customer data, after-sales service and order fulfillment, and only secondarily by defining more consistent information for upstream processes.

In no other area of supply-chain management has there been such dramatic shifts during the 1990s as in the domain of software applications. The changes have occurred on two levels. First, over the last ten years, package software offerings for manufacturing companies have evolved as a major growth market. Firms now offer packaged software on mainframe or more distributed platforms such as the AS 400. Also, there has been significant growth in new firms which offer software packages on client/server platforms with versions of the UNIX operating system. Second, for most of the 1990s and earlier decades of predominantly mainframe-based computing, the dominant paradigm for implementing software was based on the "waterfall" approach, where a complex linear process was launched to specify client needs followed by the development of applications software over four-to-five years. Such projects often led to very high failure rates of 80 percent or more.

However, over the last five years this paradigm has begun to be challenged by companies which provide more adaptable software on lower-cost platforms, and/or by companies whose specialty is rapid application software implementation on a fixed-cost, fixed-time basis. The latter companies usually emphasize the customer value side of the supply chain and focus on implementing systems in 6-12 months. They also attempt to share the risks of time and cost overruns with their clients. Clearly there are significant alternatives for manufacturing companies. General managers in hypercompetitive markets are no longer restricted to software application changes in their supply chain which are not consistent with their competitive needs for rapid, high quality and lower-cost information systems.

Most large manufacturing companies are trying to leverage their supply chains on a global, regional and local basis simultaneously. A firm can enjoy the cost reduction and value-creating advantages of consistent computer platforms, operating systems, etc., and still tailor software application packages for localized content where necessary. At the same time that these firms have moved to client/server technology and more robust voice, data and video networks, they have also instituted standards for IT infrastructure. Thus, they have sought to globalize infrastructure and lower costs as a percentage of sales while implementing applications software rapidly in their supply chains regionally and locally.

Many leading manufacturers are committing millions of dollars to IS and IT projects whose benefits will take four-to-five years to reap, if at all. More than one large manufacturing company in Europe has committed 200-300 million dollars on integrated, supply-chain management projects whose implementation risks are high and whose business paybacks are perhaps low for the hypercompetitive markets of the late 1990s. Fast, flexible and modular software systems and databases will differentiate manufacturing companies over the next two-to-four years in hyper-competitive markets. Those companies who enter into IS and IT projects with the wrong competitive assumptions may find that their approach has become a competitive disadvantage. They will have created significant business risks at precisely the time when their competitors are creating value with customers through rapid, focused and continuous improvements in supply-chain core processes and information flows.

New Words

1. entrant ['entrənt] *n.* 进入者
2. disrupt [dis'rʌpt] *v.* [使]中断, 分裂, 瓦解
3. reengineering *n.* 再设计, 再造
4. increment ['inkrɪmənt] *n.* 增加, 增量
5. modular ['mɒdjuəl] *a.* [数][物]模的, 有标准组件的
6. implementation [ˌɪmplɪmen'teɪʃən] *n.* 执行
7. undo ['ʌn'du:] *v.* 解开, 松开
v. 取消, 撤销
8. unlearn ['ʌn'lɜ:n] *v.* 忘却
9. substantial [səb'stænjəl] *a.* 坚固的, 实质的, 真实的, 充实的
10. consistent [kən'sɪstənt] *a.* 一致的, 调和的, 坚固的, [数、统]相容的
11. eliminate [ɪ'lɪmɪneɪt] *v.* 排除, 消除
v. 除去
12. empower [ɪm'pauə] *v.* 授权与, 使能够
13. buffer ['bʌfə] *n.* 缓冲器, 消音器
14. domain [dəu'mein] *n.* 领土, 领地, (活动、学问等的)范围, 领域

15. mainframe ['meɪnfreɪm] *n.* [计]主机,大型机
16. specify ['spesɪfaɪ] *v.* 指定,详细说明,列入清单
17. paradigm ['pærədaim, -dɪm] *n.* 范例
18. overrun [ˌəʊvə'rʌn] *n.* 泛滥成灾,超出限度
v. 蹂躏,超过,泛滥
19. precisely [pri'saɪsli] *adv.* 正好

Notes about Terms

1. IMD: International Institute For Management Development 瑞士国际管理学院
2. IS: Information System 信息系统
3. IT: Information Technology 信息技术
4. UNIX: 操作系统,最早由美国电话电报公司贝尔实验室开发的

Notes about Sentences

1. However, hyper-competitive firms (where customer loyalty is challenged continuously and where organizations must transform their capabilities and processes to match or exceed those of competitors) are constantly seeking to disrupt the competitive advantage of industry leaders and create new opportunities. 无论如何,处在高度竞争中的公司不断地寻求打破行业领导者的竞争优势,创造新的机会。(对于处在高度竞争中的公司而言,客户忠诚始终处于挑战之中,组织必须提高能力和改善流程以应对或超越竞争对手。)

2. In hyper-competitive markets, the pursuit of four-to-five-year reengineering application software and database projects is questionable, as firms are continually changing their strategic capabilities in small 6-12-month increments; short-term changes which permit new bases for profitability and growth. 在过度竞争的市场,试图制定四年或五年的业务流程再造应用软件和数据库是不可行的,因为公司在每6到12个月的基础上持续的改变战略能力;短期改变构成新的盈利和增长的基础。

3. The operational focus of supply-chain management projects may also be at issue in moderate versus hyper-competitive markets. In the former, investing in upstream projects (new financial systems, production planning or inventory management systems) may offer substantial benefits, including consistent information sharing and improved cross-functional cooperation. 在适度及高度竞争的市场中,供应链管理项目的运作重点也是值得讨论的话题。在前者,上游项目的投资(包括新的财务系统、产品规划和库存管理系统)可以带来大量的好处,包括持续的信息分享和更好的跨职能的合作。

Exercises

I. Fill in the blanks according to the text.

E-commerce _____ 1 _____ the marketplace to national and _____ 2 _____ markets. With

minimal capital outlay, a company can easily and _____ 3 _____ locate more customers, the best suppliers, and the most suitable business partners worldwide. For _____ 4 _____, in 1997, Boeing Corporation reported a saving of 20 percent after a request for a proposal to manufacture a subsystem was posted on the _____ 5 _____. A small vendor in Hungary answered the request and won the electronic bid. Not only was the subsystem _____ 6 _____, but it was delivered quickly. E-commerce _____ 7 _____ the cost of creating, processing, distributing, _____ 8 _____ and retrieving paper-based information. For example, by introducing an e-procurement system, companies can _____ 9 _____ the purchasing administrative costs by as _____ 10 _____ as 85 percent.

II . Translate the following sentences into Chinese.

1. In hypercompetitive conditions, the focus needs to be on process and information systems with high return-on-investment and added customer value.
2. In no other area of supply-chain management has there been such dramatic shifts during the 1990s as in the domain of software applications.
3. Those companies who enter into IS and IT projects with the wrong competitive assumptions may find that their approach has become a competitive disadvantage.
4. E-commerce allows reduced inventories and overhead by facilitating pull'-type supply chain management.
5. E-commerce provides flexibility in manufacturing, permits faster delivery to customers and supports rapid and paperless transactions among suppliers, manufacturers, and retailers.

III . Translation the following sentences into English.

1. 在适度及高度竞争市场条件下,信息管理、信息系统和信息技术的权衡与选择并不相同。
2. 一些公司常常强调供应链的客户价值方面,并将重点放在 6 到 12 个月的执行系统上。
3. 多数大规模生产企业都会尽量同时去平衡它们全球化的、区域性的和当地的供应链。
4. 他们的竞争者在供应链核心过程及信息流中快速、集中、连续的进行改进,以在客户上创造价值。
5. 当被问及这些项目的影响时,管理者常常会说他们的公司更为顾客负责,更具成本效益,并且能在职能之间更一致及准确地分享信息。

IV . Answer the following questions.

1. Are the operational focuses of supply-chain management between in moderate and hyper-competitive markets the same? If no, what are they?
2. How did the changes of software applications in the area of supply-chain management occur during 1990s?

Text B The Significance of Virtual Value Chains in Revealing New Market Opportunities

1. The marketspace—the virtual market system of cyberspace

One can assume that through the development of networked information systems (cyberspace), a division of market systems relevant to companies takes place. Conversely, the physical world of raw materials, resources and products, the so-called marketplace, continues to exist. Within the marketplace, the traditional problems concerning the real value chain of a product or service (e. g. procurement, production, distribution, etc.) are considered. Alongside the physical world there emerges a virtual world of cyberspace induced by an increase in electronically networked information systems, this virtual world being characterized by digitalized information and communication channels. The virtual market in cyberspace, in which information is handled, processed and utilized, and through which virtual value creation chains are brought about within data networks, can be referred to as marketspace according to Rayport and Sviokla. It is in this context that virtual marketplaces and virtual transactions of or with information develop. This means that the marketspace can be seen as an artificial, intangible market for information.

The consequences of this division of relevant market systems into marketplace and marketspace can be structured in three central lines of development:

(1) Performance improvements in the marketplace: information can help to achieve a supporting increase in efficiency of the actual offer (products or services).

(2) Freestanding output in marketspace: information gained from the marketspace can function as an autonomous source of competitive advantages. Information becomes a product in its own right, which is traded in the marketspace.

(3) Additional consumer value in marketspace. Through the parallel utilisation of marketplace and marketspace, information can form the basis of an additional utility in its own right over and above the physical offer in the marketplace.

The significance of both market places means that competitive successes will be determined in future by activities in the virtual and the real worlds. This development can be seen in an example from the music industry.

There has been a massive increase in the use of information networks by companies in the music industry. Various suppliers of sound carriers can be contacted through the networks, such as World Wide Web (WWW), of commercial online services (for example BMG, Sony, Geffen Records etc.). Originally the aim was to present real sound carriers. However, the information networks can offer additional services to those products traded in the marketplace. By making digital audio recordings of music available, companies have the opportunity to collect information about the popularity of the music before they undertake an expensive launch. Because electronic traces of users are left behind (e. g. the

calling-up rates of music titles in combination with demographic data about users), the information can be analysed and can be transformed into profiles of potential users. Through the use of information in marketplace, physical (real) offers of sound carriers and their contents can be more effectively matched to the corresponding user profiles. In the future, it will be possible to sell music directly through information networks; these can also be combined with other products such as concert tickets and video clips.

Three lines of development resulting from the division of market systems into marketplace and marketspace are indicated in this example:

(1) Consumer profiles provide useful information which can be used for example to improve the functionality and quality of real sound carriers (performance improvements in the marketplace).

(2) Consumers can be offered the opportunity in marketspace (e. g. through an online system) of being able to compile individual pieces of music and to transfer them directly onto CD or PC (freestanding output in marketspace).

(3) Digital audio recordings can be supplemented in marketspace by additional information for example about the production of music titles or about the artists (additional consumer value in marketspace).

2. The importance of virtual value chains in the marketspace for competitive successes in information-based markets

The creation of a marketspace in cyberspace will make it necessary for companies to reconsider the way they regard value-creating measures. In the future, a company will be able not only to achieve consumer values through physical value adding in the marketplace but also through virtual value adding in marketspace. The analysis of value chains in the physical marketplace is based on the approach of Porter. The value chain divides a company into strategically-relevant activities and identifies physically and technologically distinguishable value activities, for which the customer is prepared to pay. In this case, information also plays an important role in terms of competitive success because it is through information that existing processes can be better analyzed and controlled. However, this information has until now been seen simply as a supporting element rather than a source of value to the consumer in its own right.

Porter's value chain can be used in two ways in the virtual world of data networks to consider value chains in the virtual marketspace:

(1) Rayport and Sviokla have highlighted that first, a virtual picture of the physical value chain in the business process can be created. Each step of this virtual picture is then to be tested for its information content. In this way, virtual value creation activities, which are carried out through or with the aid of information, are drawn out. These information processes are however linked to the origins of the physical value chain, as

virtual value creation activities have a direct influence on actual activities and are tied to them (information as a supporting increase in efficiency). In this context, one can also speak of a virtualactual value chain, as the relevant activities of the actual value chain also form the basis of activities in the marketspace.

(2) Going beyond the arguments of Rayport and Sviokla (1994, 1995) there are also autonomous value creation activities in marketspace, which can be traced back to the importance of information in its own right. By information functioning as a source of competitive advantage in its own right, virtual value creation activities can emerge in the marketspace, independent of a physical value chain. These virtual value creation activities are not however of the same nature as the physical value activities identified by Porter, but take the form of the collection, systemisation, selection, combination and distribution of information. It is through these specific virtual value creation activities at an information level that a virtual value chain, whose origin and influence can only be found in the marketspace, manifests itself. This is the case for example when in the music industry information which has been collected from the electronic traces of users in the digital information network and which can provide detailed information about the musical tastes of consumers can be sold on to electronic entertainment companies.

Owing to the significance of marketspace, a common value matrix will exist in the future, in which there will be an intensification of different value chains. This argument is also put forward by Rayport and Sviokla in which the existence of a freestanding value chain in marketspace was considered in terms of the formation of new outputs through information processes. The relevance of these arguments depends on the extent to which the product is linked to information technology. Generally it can be assumed that this link is stronger in the case of durable consumer goods than goods with a short life cycle. A first summary point and recommendation for action at this stage would be:

The growth in information technology and networks will lead to a division of marketsystems into marketplace and marketspace which is important for competition. Virtual value creation activities enable performance improvements and supplements to be achieved in the marketplace and freestanding outputs to be offered in marketspace. The value creation activities in both market systems should ideally be combined in a common value matrix.

Here, we offers an explanation of the phenomenon of the marketspace, a new virtual market form, which is induced by the increasing exchange of communication and information through digital data-networks. The virtual market form of the marketspace will exist parallel to the marketplace, which represents the physical world of raw materials and resources. By analyzing the trade relationship in the marketspace, the factor "information" is identified as the key factor of competition, and this factor should be

strategically offered either as quickly as possible (speed-leader) or should be of high quality or relevance (topical-leader). In the future, information exchange through the digital data networks of the virtual marketspace will be dominated by interactivity, which means every participant will be actively and individually involved in information exchange. These conditions infer an information-based marketing, which focuses on the individual consumer and enables (inter) active embedding into the value chain of the enterprise.

Reading Materials

A History of Logistics / Supply Chain Management

According to the Council of Supply Chain Management Professionals (CSCMP), a professional organization for Logistics and SCM professionals, logistics is defined as:

“the process of planning, implementing and controlling the efficient, effective flow and storage of goods, services and related information from point of origin to point of consumption for the purpose of conforming to customer requirements.”

Within this process there are key logistical activities that facilitate the above flows. They are:

- **Customer Service:** Ensuring the right product is at the right place at the right time.
- **Demand Forecasting & Planning:** Determining the quantity to be ordered.
- **Inventory Management:** Balancing inventory levels to achieve high customer service levels.
- **Communication Technology:** Linking suppliers to customer demand patterns to facilitate Just-In-Time product replenishment.
- **Materials Handling:** Minimizing the movement of raw materials, work in process and finished goods.
- **Order Processing:** Using e-commerce to facilitate information exchanges.
- **Purchasing:** Selecting the best supplier to meet quality requirements.
- **Transportation:** Selecting the best mode of transportation (air, rail, water or truck).
- **Warehousing:** Locating and designing facilities to meet customer service levels.

Logistics has always been a critical part as one of the 4 P's in Marketing: Product, Place, Price and Promotion. The “Place” component ensures the product is at the right place, at the right time, in the right quantity and the right quality. Read about how the logistics discipline started and where it is headed.

- **Military Roots**

Logistics received recognition in military operations during World War II. It gained its momentum as it contributed to the effective distribution of machinery and supplies to troops. A service delivery failure here may mean an increase in unnecessary fatalities. Peter Drucker (a business guru in the 1960's) identified logistics as a growing concern within business. This generated more prominence towards the practice of logistics.

- **Deregulation**

As the economies in North America evolved in the 1970's and 1980's, transportation

deregulation changed the competitive landscape of business. Carriers were free to charge their customers (shippers) a competitive rate for their shipments. Warehousing companies that typically acted as surplus inventory storage locations, married up with transportation companies to offer customers full-service solution capabilities. This formed the beginning of the 3rd party logistics business and paved the way for outsourcing logistical activities.

- Globalization

With the advent of globalization, firms began to seek ways of cutting their production costs. Thus, multi-national corporations re-located their factors of production to low-wage countries to gain a competitive advantage. Increasingly, more and more countries are joining the World Trade Organization (WTO) and opening their country to foreign capital investment (most recently in China). Retail giants like Wal-Mart exploit these new efficiencies and increase their imports from new emerging economies to reduce product prices in their stores. Thus, the new challenge is how to manage the product and information flows around the world. The increased pressure on managing these operations further underscored the importance of logistics as an area for optimization.

- Information Technology

Another contributor that led to an increased presence for logistics was the explosion in information technology and use of computers throughout the 1980's and onwards. The cost of computing has decreased year after year since then and computing power rose exponentially. The use of the Internet and increased bandwidth capacity further enhanced and enabled quick connectivity and collaborative relationships that reduced inventories and created a Just-In-Time operating opportunity for organizations. These efficiencies reduced errors, increased fill-rates and cut overall operating costs for organizations.

- Supply Chain Management

As the above factors fuelled efficiencies, logistics gained more prominence in organizations. A natural extension was to link the logistical operations from each firm to the entire supply chain. The new paradigm became known as the systems approach' to supply chain management and introduced the concept of trade-offs. In order to achieve least total supply chain cost, operational integration of the 5 main areas of logistics must be simultaneously optimized: Warehousing, Transportation, Inventory, Order Processing and Lot Quantities. Optimizing any one of these areas individually will sub-optimize the system as a whole. For example, a single warehouse in a network would achieve the lowest warehousing cost. This would create high transportation costs as suppliers ship over greater distances to ship products into the warehouse and conversely, outbound to its market distribution area. The addition of a second warehouse in the network would reduce transportation costs more than the marginal cost of operating the second warehouse, which would reduce total supply chain costs.

- Future Challenges

As the business landscape constantly changes with mergers & acquisitions and as

globalization grows, there are corresponding changes in the supply chain that need to continuously be optimized to ensure least total supply chain costs. Radio Frequency Identification (RFID) and other technologies will continue to drive down inventories as better information is made available in a timely manner. Since supply chain activities cross over all functional areas in an organization (such as Marketing, Finance and Human Resources), new metrics must be developed to track true supply chain costs and identify the impact on new costs as corporate strategies change. Organizations that measure and benchmark these costs will have a sustainable competitive advantage going forward.

Unit 9 Advertising Strategies

Text A Advertising Methods on the Web

Advertising is an attempt to disseminate information in order to effect a buyer-seller transaction. In a traditional sense, advertising was impersonal, one-way mass communication or mass marketing, which was paid for by sponsors. Telemarketing and direct mail were attempts to personalize advertising in order to make it more effective. These direct marketing approaches worked fairly well but were expensive. The Internet redefined the meaning of advertising. The Internet has enabled consumers to interact directly with advertisers and advertisements. In interactive marketing, a consumer can click with his or her mouse on an ad for more information or send an E-mail to ask a question. The Internet has provided the sponsors with two-way communication and E-mail capabilities, as well as allowing the sponsors to target specific groups on which they want to spend their advertising dollars, which is more accurate than traditional telemarketing. Finally, the Internet enables a truly one-to-one advertisement.

1. Some of the major methods used for advertisements are:

1) **Banners**: Banner advertising is the most commonly used form of advertising on the Internet. As you surf your way through the information superhighway, banners are everywhere. The file size of the image should be about 7kb to 10kb. The smaller the file size, the quicker it loads. Designers of banners pay a lot of attention to the size of the image because long downloading times may cause a viewer to become impatient and move on before the banner is fully displayed. Typically, a banner contains a short text or graphical message to promote a product. Advertisers go to great lengths to design a banner that catches consumers' attention. With the progress of Internet programming we are starting to find banners with video clips and sound. Banners contain links that, when clicked on, transfer the customer to the advertiser's home page. There are two types of banners: keyword banner and random banner. Keyword banners appear when a predetermined word is queried from the search engine. It is effective for companies who want to narrow their target audience. Random banners appear randomly. Companies that want to introduce their new products use random banners.

A major advantage of using banners is the ability to customize them to the target audience. One can decide which market segments to focus on. Banners can even be customized to one-to-one targeted advertisement. Also, "forced advertising" marketing strategy is utilized, which means customers are forced to see it. The disadvantages are

high overall cost. If a company demands a successful marketing campaign, it will need to allocate a large percentage of the advertising budget to acquire a high volume of CPM.

There are several different forms of placing banner advertising on the Internet on others' Web sites. The most common forms are: Banner Swapping, Banner Exchanges, and Paid Advertising. Banner swapping means that company A agrees to display a banner of company B in exchange for company B displaying company A's ad. It is a direct link between Web sites. This is probably the least expensive form of banner advertising to establish and maintain, but it is also difficult to arrange. Frequently banner swapping does not work because a match is not possible. If there are several companies involved, however, a multicompany match may be easier to find. Banner exchange organizations arrange for a trading of three or more partners. Paid advertisement means purchasing banner ad space on the Internet, it is similar to buying ad space in other media.

2) Splash screen: A splash screen is an initial Web site page used to capture the user's attention for a short time as a promotion or lead-in to the site home page or to tell the user what kind of browser and other software they need to view the site.

The major advantage of a splash page over any other advertising method is that one can create innovative multimedia effects or provide sufficient information for a delivery in one visit.

3) Spot leasing: Search engines often provide space (spot) in their home page for any individual business to lease. The duration of the lease depends upon the contract agreement between the Web site host and the lessee. Unlike banners, which show up at various times, the ad place on the spot will always be there; hence, competition is reduced. The disadvantage of spot leasing is that the size of the ad is often small and limited, causing some viewers to miss the ad. Also, the cost can be very high.

4) URL (Universal Resource Locators): The major advantage of using URL as an advertising tool is that it is free. Anyone can submit its URL to a search engine and be listed. Also, by using URL the targeted audience can be locked and the unwanted viewers can be filtered because of the keyword function. On the other hand, the URL method has several drawbacks. First, due to intense competition, a company's listing at the top of the list of a search engine can easily be replaced by others. Moreover, different search engines index their listings differently.

5) E-mail: Another way to advertise on the Internet is to purchase E-mail addresses and send the company information to those on the list as was shown in the CD-Max case. The advantages of this approach are its low cost and the ability to reach a wide variety of targeted audiences. Most companies develop a customer database to whom they send E-mails. Of the many E-mail distribution service companies, one should note www.spamet.com, which uses enhanced E-mail.

E-mail is emerging as a marketing channel that affords cost-effective implementation and better, quicker response rates than other advertising channels. A list of E-mail

addresses can be a very powerful tool because you are targeting a group of people you know something about. To create your own mailing list, consult www.onelist.com (the service is free) or www.revnet.com.

6) Chat rooms: Electronic chat refers to an arrangement where participants exchange messages in real time. The software industry estimates that several hundred thousand Web sites have millions of chat rooms.

A vendor frequently sponsors chat rooms. Chat capabilities can be added to a business site for free by letting software chat vendors host your session on their site. You simply put a chat link on your site and the chat vendor does the rest, including the advertising that pays for the session.

Chat rooms are also used as one-to-one connections between a company and their customers. For example, Mattel sells about one-third of its Barbies to collectors. These collectors use the chat room frequently and are likely to pay attention to Mattel's or others' advertisements there.

2. Why Internet advertisement

There are several reasons why companies advertise on the Internet. To begin with, television viewers are migrating to the Internet. The media follows, acknowledging that the goal of any advertiser is to reach its target audience effectively and efficiently. Advertisers recognize that they have to adapt their marketing plans to account for the ever-growing number of people spending increasing amounts of time online, frequently at the expense of other media.

Research conducted in fall 1996, found that three-quarters of PC users were willing to give up television to spend more time on their computers. The migration of so many from television seems very impressive. Add to this the fact that the Internet users are well educated with high incomes, it is only logical to conclude that Internet surfers are a desired target for advertisers.

Other reasons why Web advertising is growing rapidly are:

- Ads can be updated any time with a minimal cost; therefore, they are always timely.
- Ads can reach very large numbers of potential buyers globally.
- Online ads are sometimes cheaper in comparison to television, newspaper, or radio. The latter are expensive since they are determined by space occupied, how many days (times) they are shown, and on how many national and local television stations and newspapers they are posted.
- Web ads can efficiently use the convergence of text, audio, graphics, and animation.
- The use of the Internet itself is growing very rapidly.
- Web ads can be interactive and targeted to specific Interest groups and/or individuals.

These characteristics began to convince large consumer products companies to shift an increasing amount of advertising dollars away from traditional media to Web advertisement.

New Words

1. sponsor ['spɒnsə] *n.* 发起人, 主办者, 保证人, 主办人
v. 发起, 主办; 赞助
2. telemarketing ['teli'ma:kitiŋ] *n.* 电话销售, 电话推销
3. personalize ['pə:sənəlaiz] *v.* 使成私人的, 个性化
4. graphical ['græfikəl] *a.* 绘成图画似的, 绘画的
5. predetermine [ˌpri:di'tə:min] *v.* 预定, 预先确定
6. randomly *adv.* 随便地, 未加计划地
7. customize ['kʌstəmaiz] *v.* [计] 定制, 用户化, 客户化
8. allocate ['æləukeit] *v.* 分派, 分配
9. swapping ['swɒpiŋ] *n.* 交换, 交换技术
10. lease [li:s] *n.* 租借, 租约, 租赁物, 租期
11. submit [səb'mit] *v.* (使)服从, (使)顺从
12. drawback ['drɔ:ɪbæk] *n.* 缺点, 障碍
13. filter ['filtə] *n.* 滤波器, 过滤器, 滤光器, 筛选
v. 过滤, 渗透, 用过滤法除去
14. intense [in'tens] *a.* 强烈的, 剧烈的, 热切的, 激烈的
15. convergence [kən'vɜ:dʒəns] *n.* 集中, 收敛
16. animation [ˌæni'meɪʃən] *n.* 活泼, 有生气

Notes about Terms

1. CPM: 每千次展示费用。Cost Per Mille/Thousand/Impressions 广告投放过程中, 听见或者看见某广告的每一人平均分配到多少广告成本。传统媒介多采用这种计价方式。

2. Splash screen: 闪屏; 快闪窗口, 也被称为启动屏幕或插播广告, 是一个初始化网页, 用来在短时间内吸引用户的注意力, 以推销产品、导入主业或者告诉用户需要用哪种浏览器和软件来浏览该网站。它就像电视广告一样出现在电脑屏幕上。

3. Spot leasing: 空间租赁。

4. Mass marketing: 大众营销。

5. Paid Advertising: 收费广告。

6. Search engine: 搜索引擎。

7. URL: Universal Resource Locators 统一资源定位器, 也就是通常所说的网址。是在 Internet 的 WWW 服务程序上用于指定信息位置的表示方法, 它指定了如 HTTP 或 FTP 等 Internet 协议, 是唯一能够识别 Internet 上具体的计算机、目录或文件位置的命名约定。

8. Interactive marketing: 互动营销。

Notes about Sentences

1. It is effective for companies who want to narrow their target audience. Random banners appear randomly. Companies that want to introduce their new products use random banners. 对于那些想缩小他们目标客户的公司来说这是有效的。随意旗帜广告是随意出现的。公司想介绍他们的新产品往往会采用它。

2. Unlike banners, which show up at various times, the ad place on the spot will always be there; hence, competition is reduced. 不像可以在不同的时间出现的旗帜广告, 定点广告的地方总是在那儿不变; 因此, 其竞争性就会减小。

3. A splash screen is an initial Web site page used to capture the user's attention for a short time as a promotion or lead-in to the site home page or to tell the user what kind of browser and other software they need to view the site. 闪屏: 一个闪屏就是一个最初的网站的网页, 他们使用这种方法在短时间内获取使用者的注意力或进入一个网页的主页或告诉使用者他们要访问的网站使用的是什么样的浏览器和软件。

4. The Internet has provided the sponsors with two-way communication and E-mail capabilities, as well as allowing the sponsors to target specific groups on which they want to spend their advertising dollars, which is more accurate than traditional telemarketing.

“as well as”连接的并列句子成分。此句译为: “互联网提供给广告主的是一种双向互动交流和电邮能力, 同时使得广告主能够定位他们想把广告费所投向的具体目标人群, 这比传统的电话营销来得更加准确。”

5. Advertisers recognize that they have to adapt their marketing plans to account for the ever-growing number of people spending increasing amounts of time online, frequently at the expense of other media.

此句译为: “广告客户认识到他们必须调整营销计划来适应数量不断增长, 持续增加网络在线时间而代替其他媒介的目标群。”

Exercises

I. Fill in the blanks with the correct form of the words given below.

credit	specify	partner	submit	access
target	bartering	involve	match	purchase

Frequently banner swapping does not work because a 1 is not possible. If there are several companies 2, however, a multi-company match may be easier to find. For example, out of three companies, A can display B's banner, but B cannot display A's banner optimally. However, B can display C's banner, and C can display A's banner. Such may involve many companies. Banner exchange organizations arrange for the trading of three or more 3. It workssimilarly to that of a regular 4 exchange. A firm 5 a banner to the exchange service and displays a link on one of its Web pages, which will display a different banner each time the page is 6. Each time

the participant displays a banner for one of the exchange's members it receives a 7. After a participant has "earned" enough credits, its banner is displayed on an appropriate member's site. Most exchanges offer members the opportunity to 8 additional display credits. Many of the exchanges also permit the participants to 9 what type of site the banner can be displayed on, thus allowing the advertiser to 10 what type of audience will see the banner ad.

II. Translate the following sentences into Chinese.

1. In interactive marketing, a consumer can click with his or her mouse on an ad for more information or send an E-mail to ask a question.
2. Also, by using URL the targeted audience can be locked and the unwanted viewers can be filtered because of the keyword function.
3. Chat capabilities can be added to a business site for free by letting software chat vendors host your session on their site.
4. Advertisers recognize that they have to adapt their marketing plans to account for the ever-growing number of people spending increasing amounts of time online, frequently at the expense of other media.
5. These characteristics began to convince large consumer products companies to shift an increasing amount of advertising dollars away from traditional media to Web advertisement.

III. Translate the following sentences into English.

1. 互联网使消费者直接影响广告主和广告。
2. 旗帜广告的设计者非常关注图像的大小,因为过长的下载时间会使浏览者没有耐心继续下去直到旗帜广告全部显示出来。
3. 闪屏相对于其他广告方式而言最主要的优势就是你能创造新颖的多媒体效果或者在一次访问的一次交付中提供充分的信息。
4. 搜索引擎通常会在主页中提供空间出租给个体商户。出租时间是由网站和承租人签订的合同协议决定的。
5. 在互联网上做广告的另一方法就是购买电子邮件地址,并且把公司信息发送到列表中的地址。

IV. Answer the following questions.

1. What are the major methods used for advertisements on the Internet?
2. Why do companies advertise on the Internet?

Text B Advertisement Strategies

Several advertisement strategies can be used over the Internet. Before we describe them, it will be useful to present some important considerations in Internet-based design.

Considerations in the Internet-based Ad Design

Some commonly accepted commandments of advertising on the Internet are advocated by Choi et al. and by others. Representative examples are:

- **Advertisements should be visually appealing.** In mass media, advertisements should be colorful to catch the reader's attention. On the Internet, this principle can be realized by adopting interactive and moving Web content that can grab the visitor's attention and draw repeated visits.
- **Advertisements must be targeted to specific groups or to individual consumers.** Ads should be customized and speak on a personal level.
- **The content should be valuable to consumers.** Web pages should provide valuable information, avoiding useless and large files that slow down loading time.
- **Advertisements must emphasize brands and a firm's image.** Ads should emphasize how your firm and its products and services differ from other competition.
- **Advertisements must be part of an overall marketing strategy.** Firms should actively participate in all types of Internet activities, such as newsgroups, mailing lists, and bulletin boards. All activities constitute a strategy. Also, online advertisements should be coordinated with offline advertisements.
- **Advertisements should be seamlessly linked with the ordering process.** When the customer has become interested after having seen the ads, the advertised items should be able to be ordered and paid for conveniently, preferably online.
- **Designing Internet ads. Successful Web site design is an art as well as a science.** It is actually a difficult task. For example, a study of Web ads done by the University of Michigan business school students for a Web company, Athenia Associates, showed that ads placed in the lower right-hand corner of the screen, next to the scroll bar, generate 228 percent higher click-throughs than ads at the top of the page. The study also found that ads placed one-third of the way down the page increased click-through 77 percent over ads at the top of the page, where ads are usually positioned. Andrew Kind, Webmaster with Athenia, attributed the higher click-throughs to the ads' positioning in the "click zone", where a user's mouse is naturally drawn. Information about the study is available at <http://www.webreference.com/dev/banners>. In many cases it is best to solicit the help of an expert or consultant to design Internet ads.

The 50 variables were divided into five categories. The authors conducted experiments to find their relative importance. Several of the most important variables in each category are listed below together with recommendations.

- Page-Loading Speed
 - ❖ Graphics and tables should be simple and meaningful. They need to match standard monitors.
 - ❖ Thumbnail (icon graphs) are useful.
- Business Content
 - ❖ Clear and concise text is needed. A compelling page title and header text is useful.

- ❖ The amount of requested information for registration should be minimal.
- Navigation Efficiency
 - ❖ Well-labeled, accurate, meaningful links are a must.
 - ❖ Sites must be compatible with browsers, software, etc.
- Security and Privacy
 - ❖ Security and privacy must be assured.
 - ❖ Rejecting cookies option is a must.
- Marketing Customer Focus
 - ❖ Clear terms and conditions of the purchases, including delivery information, return policy, etc. , must be provided.
 - ❖ Confirmation page after a purchase is needed.

When the designed ads are in line with the above commandments, we can implement Internet-based advertisement in one, or as a combination, of the following strategies.

Passive Pull Strategy

Usually, customers will look for a site and visit it only if it provides helpful and attractive contents and display. This strategy when Web pages are waiting for a customer's passive access, is referred to as passive pull strategy. The passive pull strategy is effective and economical when advertising to open, unidentified potential customers worldwide. However, since there are so many Web pages open to all customers, there is a need for a directory that can guide customers to targeted sites. For instance, refer to the site Advertising World (<http://advertising.utexas.edu/world>). This is a noncommercial site that can guide customers. In this sense, portal search engine sites like Yahoo can be regarded as an effective aid for advertisement. These sites are all equipped with directories for the registered sites.

A site may be either a pure advertisement site (which means it does not offer order entry and payment capabilities) or a complete retailing storefront (like Amazon). The ads in the latter case can be directly linked to sales. In this case, the ad can be regarded as the first step of sales activity on the Internet. When the site is an E-mail, we can see its own directory and search engines, which help find the desired products and services. In this sense, the directory in the E-mail can be regarded as the second step in the passive pull strategy.

Active Push Strategy

If customers do not visit the merchants' sites voluntarily, merchants need to actively advertise to the targeted customers. One option of this strategy is sending E-mails to the relevant people. The first issue to be considered by merchants adopting this strategy is how to obtain the mailing list of the target customers. Companies like DoubleClick (www.doubleclick.com) have started to generate mailing lists to meet this need. For a

comprehensive list of such companies, refer to the direct marketing menu in Advertising World (<http://advertising.utexas.edu/world>). For a case study of utilizing the mailing list service from Double Click, refer to Application Box 4.2. Mailing list generation is done in different ways, as was shown in the opening vignette. Companies are also using agent technology and cookies, as we will discuss in sections 4.5 and 4.8.

Associated Ad Display Strategy

With a banner, a display may be organized independently of who reads it and what is read. If the merchant can identify the person and the characteristics of accessed pages, displaying an associated ad can be a very effective advertisement. Let us call this the associated ad display strategy. For example, in using MapQuest (www.mapquest.com), which supports hotel reservations, the user may select an indexed category such as “lodging” within a city. Then, a Radisson ad may be displayed. These kinds of targeted ads cost about \$40 per thousand impressions, compared with; \$25 per thousand impressions for other ads. Another example of associated ad display can be found at Amazon. When the customers read about a book, a list of books under the title “Customers who bought this book also bought...” is displayed. To support this kind of service, Amazon’s system must have the capability of data-mining from past records and storage in the database. The ad display can be directly ordered seamlessly. In this sense, this strategy can be regarded as just-in-time strategy.

Ads AS A Commodity

According to this strategy, an ad is sold as a product, using the approach of CyberGold (www.cybergold.com) and others. Interested consumers read the ads in exchange for direct payment made by the advertisers. Consumers fill out data on personal interests, then CyberGold distributes targeted banners based on the personal profiles. Each banner is denoted with the amount of payment for reading it. If interested, the reader clicks the banner to read it and, passing some tests on its contents, is paid for the effort. Readers can sort and choose what they read, and the advertisers can vary the payment level reflecting the frequency and desirability of readers. Payments can be cash (\$1 per banner) or discounts on the products sold.

Reading Materials

How to Start Selling Online

If you have decided to take your business online, there are a few things you will need to take into consideration before you launch your new site.

First, you will need to write a privacy policy that will protect your company and provide your customers with trust in your site. Online buying is based on trust, and customers deserve to know what you plan to do with the data you collect. See [What Should Business Web Site's Privacy Policy Cover](#) for more information.

Second, you'll need to make sure that your online transactions are secure. SSL (secure socket layer) encryption protects your customers' sensitive information, including credit card and personal information, during online transactions. Many web hosting companies will let you share their SSL certificate. If you'd rather have your own, you can expect to pay \$100 to \$350 a year.

A shopping cart is a necessity for any online business. There are lots of cart applications to choose from, so make sure the one you choose is easy to install and use. Try a few trial sales with your cart to ensure that it's user-friendly and easy to understand. Check out [Shopping Cart Options for Small Business Web Sites](#) for additional advice.

You'll also need a way to accept online payments. You have more choices than ever for processing payments online. It can be as simple as a PayPal account, or as complex as your very own merchant account. If you opt to go for a merchant account, you will need to decide how you plan to process payments, either in real-time as the customer enters their data; offline, where you process all of your orders at once; or over the phone.

Order fulfillment is a facet of selling online that's commonly overlooked. Turnaround time is critical in keeping customers happy. Before you end up with a backlog of orders that need to be sent, make sure that your current system can handle an influx of orders.

Telephone ordering is also often ignored, as some consumers still aren't comfortable giving their credit card information over the Internet. A toll-free number is a worthwhile expense to ensure that you can accommodate these customers.

Now that you have the back-end ready, you're ready to launch your new site. To ensure you're your launch isn't greeted by an overwhelming lack of customers, you'll need to develop an advertising plan.

Advertising is essential to online success, and you may need to spend a considerable portion of your start-up money attracting new customers. Before you commit to a costly customer-acquisition strategy, explore all your options and do small test buys to see what

works. Online ads, mailing list buys, and search engine placement are some of the most popular online marketing tools.

You will also need to make plans on how to keep your customers coming back. This can include special incentives for repeat customers, free gifts with purchases, or coupons to use on future purchases.

Just because your site is live doesn't mean your work is done. A stagnant site virtually guarantees your sales will dwindle. Keep updating your site, and add informative content in addition to your products. Fresh content and other information will keep customers coming back time and again.

Selling online is not that different from selling products in a traditional store. Just because you're selling your products online does not mean that you can let your customer service slide. Don't forget the personal touch, either. Customers appreciate being remembered, both online and in real stores.

Customers are the lifeblood of your business. Even if you spend thousands of dollars attracting new customers, it will not do you much good if your store leaves them with a bad experience.

Unit 10 Security Issues in Electronic Commerce

Text A Internet E-Commerce Security

There are numerous threats to the security of Internet E-Commerce. Security breaches are most frequently discussed in terms of the Internet and the danger that hackers will intercept messages, misuse the information or modify the content of the message. The Internet is only one potential source of insecurity; further elements of the problem are:

- The customer side where a customer can be impersonated, with or without the use of the customer's equipment. The use of stolen credit card details is the simplest example.
- The vendor side where the vendor can trade inappropriately or dishonestly. Problems can range from customer details being stolen from the vendors files to bogus traders who set-up online and take money with no intention of supplying the advertised goods or services.

The security issues, across the network and at both ends, fall into a number of categories. Henning identified four pillars of secure E-Commerce, it is also called the four security requirements:

1. Confidentiality: When a message is sent electronically, the sender and receiver may desire that the message remain confidential, and thus not be read by any other parties. Thus the message must be made uninterpretable to everyone except the designated receivers, so as to give an electronic message the property of confidentiality. For electronic commerce, keeping order details and credit card information confidential during transmission is a major security concern. Further, trading partners sharing design specifications also want to ensure the confidentiality of their messages, so that proprietary design specifications can be viewed only by the sender and the intended receiver of the information. The most effective technique for masking a message is encryption.

2. Authentication: When an electronic message is received by a user or a system, the identity of the sender needs to be verified in order to determine if the sender is who he claims to be. To identify a user, at least one of the following types of information is generally required: something you have (e. g. , a token); something you know (e. g. , a PIN); or something you are (e. g. , fingerprints or signatures).

Three-factor authentication refers to techniques that use all three types of information, while two-factor authentication techniques use two of the three types of information. One-factor authentication techniques use a single piece of information for identification and are most easily defeated. Electronic authentication methods are designed

to detect if an individual is attempting to impersonate someone else. In some cases, trusted third-party services are engaged to “vouch for”, or authenticate, the user. Common authentication measures are digital signatures, one-time passwords, smart cards, tokens, and biometric devices.

3. Integrity: A message that has not been altered in any way, either intentionally or unintentionally, is said to have maintained its integrity. For electronic commerce, verifying that the order details sent by the purchaser have not been altered is one major security concern. Trading partners electronically sharing design specifications need assurance that the design specifications sent by the customer to their supplier, or vice-versa, have not been altered in anyway during their electronic transmission.

An effective cryptographic means of ensuring message integrity is through the use of hashing, where a “hash” of the message is computed using an algorithm and the message contents.

4. Non-Repudiation: The term repudiation means to refuse to accept as having rightful authority or obligation, as in refusing to pay a debt because one refuses to acknowledge that the debt exists. For business transactions, unilateral repudiation of a transaction by either party is unacceptable and can result in legal action. Well-designed electronic commerce systems provide for non-repudiation, which is the provision for irrefutable proof of the origin, receipt, and contents of an electronic message. Companies engaged in electronic commerce are often vulnerable to non-repudiation risks.

One of the solutions to these issues is encryption; Encryption is the conversion of data into a code so that it cannot be read by unauthorized users. The data is converted into the code by the sender and then decoded by the receiver. Hopefully only the sender and the receiver know the rules for encoding and decoding and thus nobody else can read the message even if they fall into the wrong hands. This is where cryptography comes into play. While cryptography dates to the ancient Greeks, today’s systems rely on sophisticated mathematical formulas and computer algorithms. Regardless of the level of sophistication, all cryptography has four basic parts:

1. Plaintext—the original message in human—readable form.
2. Cipher text—the plaintext message after it has been encrypted into unreadable form.
3. Encryption algorithm—the mathematical formula used to encrypt the plaintext into cipher text and vice versa.
4. Key—the secret key used to encrypt and decrypt a message. Different keys produce different cipher text when used with the same algorithm.

Cryptography enables not only text but also binary information—video, sound and executable software modules—to be encrypted for secure transmission across the Internet.

Different algorithms can be used to encrypt messages. Even if the algorithm is known, the message is still secure as long as the key is unknown. It is possible to guess a

key simply by having a computer try all the possibilities until the message is decrypted. This is why the length of the key is the main factor in securing a message.

For much of history, encryption algorithms were symmetrical, which means that the same key was used to both encrypt and decrypt a message. This means that the sender and receiver had to agree in advance on the key. Symmetrical key encryption is also called private key encryption.

There are a wide variety of symmetrical encryption algorithms. The most widely used symmetrical encryption algorithm was the DBS, which was sanctioned by the National Institute of Standards and Technology (NIST) for use with unclassified government documents. The DBS employed 56-bit keys. While DBS is still used, other algorithms have been invented because of its susceptibility to brute force attack. For example, RC2, RC4, and RC5 are a series of encryption algorithms invented by RSA Data Security. Their keys range in length up to 2,048 bits.

One difficulty with symmetrical or private key encryption is that many Internet messages are sent between people or people and machines that have never met. Another difficulty is that web servers are accessible to many people. If a server's private key is distributed to thousands of users, there is no way that the key will remain secret for long. For these reasons, a new type of algorithm, called public key encryption, was invented in 1976 by Whitfield Diffie and Martin Hellman.

Public key encryption, also known as asymmetrical encryption, utilizes a pair of keys—one public and one private. The public key is made available to anyone who wants to send an encrypted message to the holder of the private key. The only way to decrypt the message is with the private key. In this way messages can be sent without agreeing on the keys in advance.

Unlike symmetrical encryption, which possesses only a couple of algorithms for encrypting messages, public key has many, among which RSA is one. Employing key lengths ranging from 512 to 1,024 bits, RSA is the most widely used algorithms for encrypting Web and E-mail messages. The main problem with all public key algorithms is their speed. Symmetrical algorithms are qualitatively faster than public key algorithms because they require shorter keys.

This is why a combination of symmetrical and public key encryption is used with real-world applications. The combination of a symmetrical and public key encryption is known as a digital envelope. The basic idea is to use public key encryption to create and send a symmetrical key to the message recipient. The symmetrical key is then used to encrypt and decrypt the message.

Another solution to e-commerce security is Hashing, it is used to verify that the contents of a message have not been altered in any way, integrity check values or hash values are usually employed. A hash is a one-way function, meaning that it is virtually impossible to reverse the process and produce a message from the check value. Because the

check value reveals nothing about the message, it does not need to be encoded. The algorithm used to compute the hash value is also not secret. Commonly in sending messages, the hash value is sent along. Upon receipt, the message is calculated by the recipient using the same hashing algorithm as before. If the two hash values (received and calculated) are compared, a match can indicate that the message received is the same as that sent. Users should be cautioned that hashing is not encryption, but can be used in conjunction with encryption for added security. The only ISO accredited standard hashing algorithm is Secure Hash Algorithm-1 (SHA-1), although others exist, for example, Message Digest-5 (MD5).

New Words

1. breach [bri:tʃ] *n.* 违背, 破坏, 破裂, 裂口
v. 打破, 突破
2. intercept [ˌɪntə'sept] *v.* 中途阻止, 截取
3. impersonate [im'pə:səneɪt] *v.* 模仿, 扮演, 人格化, 拟人
4. bogus ['bəʊgəs] *a.* <美>假的, 伪造的
5. proprietary [prə'praɪətəri] *a.* 所有的, 私人拥有的
n. 所有者, 所有权
6. pillar ['pɪlə] *n.* [建] 柱子, 栋梁, 重要的支持者
7. integrity [ɪn'tegriti] *n.* 正直, 诚实, 完整, 完全, 完整性
8. cryptographic [ˌkriptə'græfɪk] *a.* 用密码写的, 加密的
9. irrefutable [i'refjutəbl] *a.* 不能反驳的, 不能驳倒的
10. vulnerable ['vʌlnərəbl] *a.* 易受攻击的, 易受……的攻击
11. encrypt [ɪn'kript] *v.* [计] 加密, 将……译成密码
12. sophisticated [sə'fɪstɪkeɪtɪd] *a.* 诡辩的, 久经世故的
13. decrypt [dɪ'kript] *v.* 译(电文), 解释明白
14. binary ['baɪnəri] *a.* 二进位的, 二元的
15. symmetrical [sɪ'metrikəl] *a.* 对称的, 均匀的
16. sanction [ˌsæŋkʃən] *n.* 批准, 同意, 支持, 制裁, 认可
v. 批准, 同意, 支持, 鼓励, 认可
17. susceptibility [sə'septə'bɪlɪti] *n.* 易感性, 感受性, 感情
18. verify ['verɪfaɪ] *v.* 检验, 校验, 查证, 核实
v. [计] 打开或关闭文件的读写校验
19. accredited [ə'kredɪtɪd] *a.* 可接受的, 可信任的, 公认的, 质量合格的

Notes about Terms

1. PIN: 个人身份号码 (personal identification number)。
2. DBS: 直播卫星 (direct-broadcast satellite)。
3. NIST: 美国国家标准和技术研究院 (National Institute of Standards and Technology) 。

4. RSA:美国 RSA 实验室,以研究加密算法而著名。
5. ISO:国际标准化组织(International Organization for Standardization)。
6. Smart card:智能卡。
7. bit:比特,信息的计量单位。
8. SHA-1:安全散列算法(一种数字签名算法)。
9. MD-5:一种散列算法,消息摘要技术的另一种叫法。
10. Hashing:散列,进行信息摘要所使用的算法。Hash 的意思:做名词为“无用数据,杂乱数据,一种无数值或逻辑意义的计算机输出数据”;做动词为“散乱,混编,采用无数值意义的数进行的一种算术运算。”
11. cryptography:密码使用法,密码系统,密码术。
12. digital signature:数字签名。
13. one-time password:一次性密码(OTP)。
14. nonrepudiation:“不可否认性”。Repudiation 有“否认、抵赖”的意思,加前缀“non-”就变成“不可否认,不可抵赖”。
15. private key encryption:密钥加密法。
16. public key encryption:公钥加密法。

Notes about Sentences

1. To identify a user, at least one of the following types of information is generally required: something you have (e. g. , a token); something you know (e. g. , a PIN); or something you are (e. g. , fingerprints or signatures). 确认一个使用者的身份,一般来说,以下类型的信息至少需要一条:你有些什么(比如:标记),你知道什么(比如:个人身份号码),或者,你是什么(比如:指纹或签名)。

2. An effective cryptographic means of ensuring message integrity is through the use of hashing, where a “hash” of the message is computed using an algorithm and the message contents. 使用 Hash 是确保信息完整性的有效加密手段,Hash 利用一种算法把信息计算成一个 Hash 值。

3. Hopefully only the sender and the receiver know the rules for encoding and decoding and thus nobody else can read the message even if they fall into the wrong hands. 庆幸的是,只有发送者和接收者知道解码和编码的规则,因此,即使误入他人手中,也没有其他人能读出信息。

4. Public key encryption, also known as asymmetrical encryption, utilizes a pair of keys—one public and one private.

公钥加密也称为非对称加密,它使用一对密钥——一个公钥,一个私钥。

5. Another solution to e-commerce security is Hashing, it is used to verify that the contents of a message has not been altered in any way, integrity check values or hash values are usually employed. “Another solution to e-commerce security is Hashing”是主语从句,it 为形式主语。

6. If the two hash values (received and calculated) are compared, a match can indicate

that the message received is the same as that sent.

如果两个 Hash 值(收到的和计算出的)相匹配,则说明发送的信息和收到的信息是相同的,因而消息的完整性没有被破坏。

Exercises

I. Fill in the blanks according to the text.

Encryption techniques generally divide into two types: 1 (single, shared) private key where the same key is used for encryption and decryption, and 2 public (twin) keys. The latter involves a public encryption key and a private decryption key. Symmetric key ciphers are relatively 3 and have high rated of data 4 but need a trusted third party manager, where public keys have larger 5 and work slower. Thus public keys are most often used to transport symmetric 6 for bulk data encryption and 7 or for encrypting small data items such as credit card numbers and PINs. 8 Key examples include DES, Blowfish, IDEA, LOKI and RC4. Public keys include Diffle-hellman, Elgama, PGP and RSA. Note that codes differ from ciphers as they involve 9 translations that may complicate any cryptographic 10.

II. Translate the following sentences into Chinese.

1. In traditional coding, both parties to a secret message had to firstly share a private password or key in order to cipher or decipher their messages.
2. Now, it was possible for one party to release a “public key” to all other parties, to enable them to encipher message but only the holder of the “private key” could decipher them upon return.
3. One of the solutions to these issues is encryption; encryption is the conversion of data into a code so that it cannot be read by unauthorized users.
4. A certificate authorities is a trusted third party agency that verifies identification, creates a recognized and trusted document that certifies personal identity.
5. “Smart Cards” are credit card like, portable, plastic envelopes encasing an integrated circuit, that combine personal digital certificates and private keys within the sealed confines of an electronic chip.

III. Translate the following sentences into English.

1. 这种体系的核心是一对由交易双方持有的数码钥匙,一个是公共的,一个是私有的。
2. 每个用户都使用自己的电子钱包来行使他们的权利及确保安全。
3. 当一个用户或系统收到一条电子信息时,必须确认发送者的身份是否与其所说一致。
4. 保持信息的完整性就是指保证其不被有意无意地改变。
5. 当发送电子信息时,发送者和接收者都希望信息保密,不被其他任何一方看到。

IV. Answer the following questions.

1. Cryptography ensures that only the sender and the receiver know the rules for

encoding and decoding of the message so that nobody else can read the message. Please summarize what are the four basic parts of all cryptography.

2. Encryption is widely used in internet E-commerce security. Briefly illustrate what are the two common encryption algorithm and the differences between them.

Text B Creating and Maintaining Brands on the Web

A known and respected brand name can present to potential customers a powerful statement of quality, value, and other desirable qualities in one recognizable element. Branded products are easier to advertise and promote, because each product carries the reputation of the brand name. Companies have developed and nurtured their branding programs in the physical marketplace for many years. Consumer brands such as Ivory soap, Walt Disney entertainment, Maytag appliances, and Ford automobiles have been developed over many years with the expenditure of tremendous amounts of money. However, the value of these and other trusted major brands far exceeds the cost of creating them.

1. Elements of Branding

The key elements of a brand, according to researchers at advertising agency Young & Rubicam, are differentiation, relevance, and perceived value. Product differentiation is the first condition that must be met to create a product or service brand. The company must clearly distinguish its product from all others in the market. This makes branding difficult for commodity products such as salt, nails, or plywood—difficult, but not impossible.

A classic example of branding a near-commodity product is Procter & Gamble's creation of the Ivory brand over 100 years ago. The company was experimenting with manufacturing processes and had accidentally created a bar soap that contained a high percentage of air. When one of the workers noted that the soap floated in water, the company decided to sell the soap using this differentiating characteristic in packaging and advertising by claiming "it floats". Thus was the Ivory soap brand born. Procter & Gamble maintains this brand differentiation on its Web site even today by listing the link to its Ivory Soap site under the heading "Beauty and Skin Care Products".

The second element of branding—relevance—is the degree to which the product offers utility to a potential customer. The brand only has meaning to customers if they can visualize its place in their lives. Many people understand that Tiffany & Co. creates a highly differentiated line of jewelry and gift products, but very few people can see themselves purchasing and using such goods.

The third branding component—perceived value—is a key element in creating a brand that has value. Even if your product is different from others on the market and potential customers can see themselves using this product, they will not buy it unless they perceive value. Some large fast food outlets have well-established brands that actually work against

them. People recognize these brands and avoid eating at these restaurants because of negative associations—such as low overall quality and high-fat-content menu items.

If a brand has established that it is different from competing brands and that it is relevant and inspires a perception of value to potential purchasers, those purchasers will buy the product and become familiar with how it provides value. Brands become established only when they reach this level of purchaser understanding and acceptance.

Unfortunately, brands can lose their value if the environment in which they have become successful changes. A dramatic example is Digital Equipment Corporation (DEC). For years, DEC was a leading manufacturer of midrange computers. When the market for computing shifted to personal computers, DEC found that its branding did not transfer to the personal computers that it produced. The consumers in that market did not see the same perceived value or differentiation in DEC'S personal computers that the buyers of midrange systems had seen for years. This is an important element of branding for Web-based firms to remember, because the Web is still evolving and changing at a rapid pace.

2. Emotional Branding vs. Rational Branding

Companies have traditionally used emotional appeals in their advertising and promotion efforts to establish and maintain brands. One branding expert, Ted Leonhardt, has described “brand” as “an emotional shortcut between a company and its customer”. These emotional appeals work well on television, radio, billboards, and in print media, because the ad targets are in a passive mode of information acceptance. However, emotional appeals are difficult to convey on the Web because it is an active medium controlled to a great extent by the customer. Many Web users are actively engaged in such activities as finding information, buying airline tickets, making hotel reservations, and obtaining weather forecasts. These users are busy people who will rapidly click away from emotional appeals.

Marketers are attempting to create and maintain brands on the Web by using rational branding. Companies that use rational branding offer to help Web users in some way in exchange for their viewing an ad. Rational branding relies on the cognitive appeal of the specific help offered, not on a broad emotional appeal. For example, Web E-mail services such as Excite Mail, HotMail, or Yahoo! Mail give users a valuable service—an E-mail account and storage space for messages. In exchange for this service, users see an ad on each page that provides this E-mail service.

Similarly, MasterCard promotes its brand name online through its Shop Smart! program. Shop Smart! is a third-party assurance mechanism. MasterCard ensures that any Web site displaying the Shop Smart! emblem (which happens to include a large MasterCard logo) is using what MasterCard defines as a “safe” method of processing transactions. In exchange for this assurance on a Web shopping site, the Web user sees the MasterCard logo.

3. Brand Leveraging Strategies

Rational branding is not the only way to build brands on the Web. One method that is working for well-established Web sites is to extend their dominant positions to other products and services, a strategy called brand leveraging. Yahoo! is an excellent example of a company that has used brand-leveraging strategies. Yahoo! was one of the first directories on the Web. It added a search engine function early in its development and has continued to parlay its leading position by acquiring other Web businesses and expanding its existing offerings. Yahoo! acquired GeoCities and Broadcast.com, and entered into an extensive cross-promotion partnership with a number of Fox entertainment and media companies. Yahoo! continues to lead its two nearest competitors, Excite and Go.com, in ad revenue by adding features that Web users find useful and that increase the site's value to advertisers. Amazon.com's expansion from its original book business into CDs, videos, and auctions is another example of a Web site leveraging its dominant position by adding features that are useful to existing customers.

4. Brand Consolidation Strategies

Another way to leverage the established brands of existing Web sites was pioneered by Delia & James, an online bridal registry that is now doing business as part of WeddingChannel.com. Although a number of national department store chains, such as Macy's, have established online registries for their own stores, Delia & James created a single registry that connects to several local and national department and gift stores including Crate&Barrel, Gump's, Neiman Marcus, Tiffany & Co., and Williams-Sonoma. The logo and branding of each participating store are featured prominently on the WeddingChannel.com site. The founders identified an opening for a market intermediary because the average engaged couple registers at three stores. Thus, WeddingChannel.com provides a valuable consolidating activity for registering couples and their wedding guests that no store operating alone could provide. WeddingChannel.com also provides wedding planning services and access to every item that a bride and groom might need—from the bridal gown to the cake—all in one convenient Web location.

5. Costs of Branding

Transferring existing brands to the Web or using the Web to maintain an existing brand is much easier and less expensive than creating an entirely new brand on the Web. In 1998, a large number of companies began spending significant amounts of money to build new brands on the Web. According to studies by the Intel-market Group, the top 100 electronic commerce sites each spent an average of \$8 million that year to create and build their online brands. Two of the top spenders included the battling Web sites

Amazon.com, which spent \$133 million, and BarnesandNoble.com, which spent \$70 million. Most of this spending was for television, radio, and print media—not for online advertising. Online brokerages E * TRADE and Ameritrade Holding were also among the top five in that first year of major brand building on the Web, spending \$71 million and \$44 million, respectively.

Brand-building activity continued on the Web through 1999 and into the first months of 2000. In March 2000, the supply of money from lenders and venture capitalists began drying up, which resulted in smaller advertising expenditures for most firms. By 2001, the peak of brand-building spending was over for new companies on the Web. Traditional firms realized that an opportunity had opened for them to move their offline brands to the Web.

Promoting any company's Web presence should be an integral part of brand development and maintenance. The company's URL should always be included on product packaging and in mass media advertising on radio, television, and in print. Integrating the URL with the company logo on brochures can also be helpful in getting the word out about the Web site. Ensuring that the site appears in search engine listings is also very important, as you will learn in the next section.

There are still other strategies used to create and maintaining a brand including affiliate marketing strategy and viral marketing strategy. In affiliate marketing, one firm's Web site—the affiliate firm's—includes descriptions, reviews, ratings, or other information about a product that is linked to another firm's site that offers the item for sale. Viral marketing now has become popular on the Web. Viral marketing relies on existing customers to tell other people—the company's prospective customers—about the products or services they have enjoyed using. Much like affiliate marketing use Web sites to spread the word about a company, viral marketing approaches use individual customers to do the same thing. The number of customers increase the way a virus multiplies, thus the name.

Reading Materials

E-Commerce Security: Fact or Fiction?

Reports of holes in companies' e-commerce systems could convince even the most rational person that thieves are prowling every corner of the Web, waiting to steal victims' credit card numbers, personal data and other sensitive information.

But as any Internet security expert will tell you, e-commerce is actually much more secure than real-world commerce. When you leave your credit card receipt on a restaurant table or give your credit card number to a telephone operator, you're accepting the risk that things you didn't order might appear on next month's bill. Yet when you enter a credit card number on a reputable e-commerce site, you're sending it over a secure connection to a server that's accessible only to authorized personnel and protected against even the most determined intruders.

Yet in the world of e-commerce, perception matters just as much as reality. Small businesses often outsource their e-commerce systems, and many small business owners don't know or care about e-commerce security technology. When your customers start to ask questions, however, it's best to know the answers before they take their business elsewhere.

Here are a few of the most frequently asked e-commerce security questions. This list isn't complete by any means, but it's a good start.

Can cyber thieves intercept a customer's credit card number on the Web?

A properly configured e-commerce system makes it almost impossible to steal a customer's credit card number. The customer's browser uses a secure connection to encrypt their credit card number and other information before it's sent; this data will remain encrypted once it's on the merchant's server. Even if thieves intercept this encrypted data, they have no way to read it. What about the flaws in e-commerce systems that are reported by the media?

These are real problems, sometimes serious enough to compromise an e-commerce system. Almost all of these flaws, however, involve obscure, extremely advanced technical knowledge. Most of them, in fact, are discovered by computer researchers who report the problems to software companies even before they appear in the press. A reputable e-commerce hosting firm will carefully track the latest bugs and security flaws, and they'll fix potential problems before an intruder has the chance to exploit them.

Does that mean that e-commerce sites might not always fix these security flaws or even know they exist?

That might be true—computer security requires constant vigilance, and administrators must know about potential problems and ways to fix them. That’s why it’s important for a business to use a reputable, experienced hosting service or e-commerce provider. Small firms don’t have the expertise to handle these problems on their own, and running a do-it-yourself e-commerce server invites trouble.

What happens if someone does steal a customer’s credit card number?

All major credit card companies provide the same consumer protection they offer with brick and mortar transactions. In most cases, this means the consumer is liable for no more than \$50 as long as they report the unauthorized use in a timely manner. The consequences can be far worse for the business from which the number was stolen—such incidents can ruin a company’s reputation and possibly expose it to legal liability. This is another good reason why you should entrust your company’s e-commerce system to a reputable provider with a solid track record.

Unit 11 Electronic Commerce Legislation

Text A Legal Issues in E-Commerce

1. The Classification of Legal Issues

Electronic commerce is so new that the legal, ethical, and other public policy issues that are necessary for EC's existence are still evolving. Many legal loopholes can be fixed only after the incident occurred. Yet, such issues are extremely important to the success of EC as they encompass one of the major pillars that support EC applications. As a matter of fact, most of the surveys that attempt to find the inhibitors of EC consistently place legal and related public policy issues at the top of the list. For example, according to the Georgia Tech 1997 and 1998 surveys, the most important issues facing the Internet were (in declining order of importance) censorship, privacy, navigation, taxation, and encryption.

These legal issues can be classified in several ways. We have segregated the EC-related legal issues to include:

- Privacy. This issue is becoming the most important issue for consumers. And indeed, privacy statements can be found today in most large EC-related Web sites. Compliance with the Privacy Act of 1974 and its extensions are not simple, since the line between legal definitions and ethics is not always clear, as we show later.
- Intellectual property. Protecting intellectual property on the Web is very difficult since it is easy and inexpensive to copy and disseminate digitized information. Furthermore, it is very difficult to monitor who is using intellectual property and how. Copyright, trademarks, and other intellectual property issues are defined by federal legislation.
- Free speech. The Internet provides the largest opportunity for free speech that has ever existed. Yet, this freedom may offend some people and may collide with the Indecency Act. Again, the line is not always clear between what is illegal and what is unethical.
- Taxation. At the present time, it is illegal to impose new sales taxes on Internet business (at least until October 2001). A possible collision between federal and state legislation is possible, as well as between tax laws of different countries.
- Consumer protection. Many legal issues that deal with consumer protection, ranging from misrepresentation to different kinds of fraud, are related to electronic trade.

- Other legal issues. Several other EC legal issues exist, including topics such as validity of contracts, jurisdiction over trades, encryption policies, and Internet gambling.
- Legal issues versus ethics. In theory, one can distinguish between legal issues and ethical issues. If you do something that is not legal, you are breaking the law. If you do something unethical, you may not be breaking the law. Obviously, many illegal acts are unethical as well. The problem is that, in information technology (IT), it is not always clear what is illegal, and ethical issues may be debatable.^[1]

2. The Legal Environment of E-Commerce

Businesses that operate on the Web must comply with the same laws and regulations that govern the operations of all businesses. If they do not, they face the same set of penalties—fines, reparation payments, court-imposed dissolution, and even jail time for officers and owners—that any business faces.^[2]

Businesses operating on the Web face two additional complicating factors as they try to comply with the law. First, the Web extends a company's reach beyond traditional boundaries. A business that uses the Web immediately becomes an international business. Thus, a company can become subject to many more laws more quickly than a traditional brick-and-mortar business based in one specific physical location. Second, the Web increases the speed and efficiency of business communications. Customers often have much more interactive and complex relationships with online merchants than they do with traditional merchants. Further, the Web creates a network of customers who often have significant levels of interaction with each other. Web businesses that violate the law or breach ethical standards can face rapid and intense reactions from many customers and other stakeholders who become aware of the businesses' activities.

These factors bring about the issues of borders and jurisdiction. Territorial borders in the physical world serve a useful purpose in traditional commerce, geographic boundaries almost always coincide with legal boundaries. The ability of a government to exert control over a person or corporation is called jurisdiction. Defining, establishing, and asserting jurisdiction are much more difficult on the Internet than they are in the physical world, mainly because traditional geographic boundaries do not exist. For example, a Swedish company that engages in electronic commerce may have a Web site that is entirely in English and a URL that ends in ".com", thus not indicating to customers that it is a Swedish firm. The server that hosts this company's Web page could be in Canada, and the people who maintain the Web site might work from their homes in Australia.

If a Mexican citizen buys a product from the Swedish firm and is unhappy with the goods received, that person might want to file a lawsuit against the seller firm. However, the world's physical border-based systems of law and jurisdiction do not help this Mexican citizen determine where to file the lawsuit. The Internet does not provide anything like the

obvious international boundary lines in the physical world. Thus, the four considerations that work so well in the physical world—power, effects, legitimacy, and notice do not translate very well to the virtual world of electronic commerce.

Jurisdictional issues are complex and change rapidly. Any business that intends to conduct electronic commerce should consult an attorney who is well versed in these procedural issues.

3. Online crime, terrorism, and warfare

The Internet has opened up many possibilities for people to communicate and get to know each other better—no matter where in the world they live. The Internet has also opened doors for businesses to reach new markets and create opportunities for economic growth.

It is sad that some people in our world have found the Internet to be a useful tool for perpetrating crimes, conducting terrorism, and even waging war.

Online Crime includes online versions of crimes that have been undertaken for years in the physical world, including theft, stalking, distribution of pornography, and gambling. Other crimes, such as commandeering one computer to launch attacks on other computers, are new. Law enforcement agencies have difficulty combating many types of online crime. The first obstacle they face is the issue of jurisdiction. Enforcing laws against distribution of pornographic material has also been difficult because of jurisdiction issues. The distinction between legal adult material and illegal pornographic material is, in many cases, subjective and often difficult to make.

A similar jurisdiction issue arises in the case of online gambling. Many gambling sites are located outside the United States. If people in California use their computers to connect to an offshore gambling site, it is unclear where the gambling activity occurs.

Another problem facing law enforcement officers is the difficulty of applying laws that were written before the Internet became prevalent to criminal actions carried out on the Internet.

Online warfare and terrorism are also two important legal issues. Many Internet security experts believe that we are at the dawn of a new age of terrorism and warfare that could be carried out or coordinated through the Internet. A considerable number of Web sites currently exist that openly support or are operated by hate groups and terrorist organizations.

The Internet provides an effective communications network on which many people and businesses have become dependent. Although the Internet was designed from its inception to continue operating while under attack, a sustained effort by a well-financed terrorist group or rogue state could slow down the operation of major transaction-processing centers. As more business communications traffic moves to the Internet, the potential damage that could result from this type of attack increases.

New Words

1. loophole ['lu:phəul] *n.* 漏洞
2. encompass [in'kʌmpəs] *v.* 包围, 环绕, 包含或包括某事物
3. inhibitor [in'hɪbɪtə(r)] *n.* 抑制剂, 抑制者
4. censorship ['sensəʃɪp] *n.* 审查机构, 审查制度
5. segregate ['segrɪgeɪt] *v.* 隔离
6. compliance [kəm'plaɪəns] *n.* 依从, 顺从
7. disseminate [di'semɪneɪt] *v.* 散布
8. digitize ['dɪdʒɪtaɪz] *v.* 使数字化
9. collide [kə'laid] *v.* 碰撞, 抵触
10. misrepresentation ['mɪsɪreprɪzen'teɪʃən] *n.* 误传, 误说
11. jurisdiction [ɪdʒuəɪs'dɪkʃən] *n.* 权限
12. dissolution [ɪdɪsə'lju:ʃən] *n.* 分解, 解散, 化解
13. stakeholder ['steɪkhəʊldə(r)] *n.* 利益相关者
14. coincide [ɪkəuɪn'saɪd] *v.* 一致, 符合
15. lawsuit ['lɔ:suɪt, 'lɔ:ʃjuɪt] *n.* 诉讼官司
16. legitimacy [lɪ'dʒɪtɪməsi] *n.* 合法(性), 正统(性), 正确(性), 合理(性)
17. pornographic [ˌpɔ:nə'græfɪk] *a.* 色情的, 色情作品的
18. inception [ɪn'sepʃən] *n.* 起初
19. rogue [rəʊg] *n.* 流氓, 无赖

Notes about Terms

1. EC: Electronic Commerce 电子商务。
2. Web site: 网站。
3. URL: Uniform Resource Locator, 统一资源定位器。在 Internet 的 WWW 服务程序上用于指定信息位置的表示方法。

Notes about Sentences

1. The problem is that, in information technology (IT), it is not always clear what is illegal, and ethical issues may be debatable. 本句可以译为“问题在于, 在信息技术中, 什么是非法的不总是很明确, 而且与伦理有关的话题常常颇多争议。” 宾语从句中套接主语从句。
2. If they do not, they face the same set of penalties—fines, reparation payments, court-imposed dissolution, and even jail time for officers and owners—that any business faces. 此句译为“网上进行的交易必须和其他交易一样遵守同样的法规。否则, 他们都将面临同样的惩罚——罚款, 补偿支付, 法院强制调解, 其官员和领导甚至要受牢狱之灾”。“—fines, ...and owners—” 两个破折号之间为句子补充成分。

Exercises

I . Fill in the blanks according to the text.

E-commerce has been a big success already, but challenges still lie ahead. Among these 1, Legal issue is being highlighted.

First of all, copyright and patent are the main e-commerce-related issues over which companies would seek legal advice. These issues are mainly happened when 2 network is used. The duty of a network administrator to prevent notified 3 of copyrights has already extended to blocking propagation of newsgroup articles, using technical means to reduce the incidence of such abuse.

Secondly, legal issue includes the determination of the jurisdiction of an e-commerce 4. This is a complicated and evolving issue. A company should consider that selling products through its Web site will 5 the number of states and countries that will be able to successfully assert jurisdiction over its activities.

Thirdly, legal issue in electronic transactions has to do with contract negotiation. This is particularly important in dynamic 6 market places. Whether for an e-tailor, a B2B enterprise or a provider of 7 services, the contracts consummated on-line must be enforceable. Without this assurance, e-commerce simply isn't viable.

Fourthly, when collecting information from purchasers or other users of a company's Web site, it is important to consider whether any privacy laws and regulations are applicable to the 8 and use of such data. This will depend on the country of the individual who supplies the data.

Finally, the growth of Internet commerce requires that a company carefully review its trademark strategy to determine whether it needs to seek additional trademark registrations by 9 of doing business on the World Wide Web. This is because the Patent and Trademark Office may categorize the appropriate goods and services classifications for a trademark differently, depending on whether the applicable product or service is made 10 over the Internet.

II . Translate the following sentences into Chinese.

1. Businesses that operate on the Web must comply with the same laws and regulations that govern the operations of all businesses.

2. Electronic commerce is so new that the legal, ethical, and other public policy issues that are necessary for EC's existence are still evolving.

3. Protecting intellectual property on the Web is very difficult since it is easy and inexpensive to copy and disseminate digitized information.

4. It is sad that some people in our world have found the Internet to be a useful tool for perpetrating crimes, conducting terrorism, and even waging war.

5. Another problem facing law enforcement officers is the difficulty of applying laws

that were written before the Internet became prevalent to criminal actions carried out on the Internet.

III. Translate the following sentences into English.

1. 电子商务的迅速崛起与广泛应用,促成了电子商务法的形成与发展。这是商法制度反映商务交易规则的必然要求。

2. 在电子商务的环境下,建立客户关系是至关重要的。如若不倾听客户的呼声,不采纳其建议,不满足其需求和愿望,这一目标是不可能达到的。

3. 例如:美国的一个陪审团最近判决了一起重大的损失赔偿案,一家网站由于张贴某些有争议人物的姓名和地址而受到惩罚。

4. 电子商务企业的领导者们熟知有关的税法,而且要保证在制定策略和进行操作之前,首先要考虑的应该是税收问题。

5. 电子采购,或者说通过电子手段获得或销售原料和产品,或者说通过电子手段获得或销售原料和产品,可能是在实际运作电子商务活动中获得利润的最迅速的方式之一。

IV. Answer the following questions.

1. Legal issues can be classified in several ways. What are the EC-related legal issues We have segregated? And please give a brief explanation on the issues.

2. What are the additional complicating factors facing? Businesses operating on the Web as the business operations try to comply with the law?

Text B Secure Payment Protocols and Security Schemes

The emergence of electronic shopping on the Internet has necessitated new payment methods. Cash cannot be a medium of payment between remote buyers and sellers in cyberspace. Therefore, the credit card has become the most popular payment method for consumer-initiated cyber-shopping. Secured payment systems are critical to the success of EC. The most common Internet payment method for the B2C EC is credit cards. However, a concern for customers is security while sending over the Internet, credit card information, including name, card number, and expiration date. Buyers also are concerned with privacy. They do not want others to know who they are, or what they buy. They also want to be sure that no one will change their order and that they are connected to the real vendor and not to an imposter.

At present most companies use SSL (Secure Socket Layer) protocol to provide security and privacy. This protocol, developed by Netscape, uses a combination of both public and private key encryption to allow customers to encrypt their order at their PC. However, this protocol does not provide customers all the protection they could have.

In 1997 Visa and MasterCard have jointly developed a more secure protocol, called SET (Secure Electronic Transaction). Theoretically, it is a perfect protocol. For example, a typical difference between SET and the widely used SSL is that SSL does not include a customer certificate requiring special software (called digital wallet) at the client site. SSL is built into the browser, so no special software is needed. The Visa and

MasterCard plan was to accept messages only if they conformed to SET protocol. However, SET did not propagate as fast as most people expected because of its complexity, slow response time, and the need to install the digital wallet in the customer's computer. Most cyber banks and e-stores stayed with SSL protocol, even though some e-stores, like Wal-Mart Online, support both SSL and SET protocols. Moreover, according to a survey by Forrest Research, only one percent of electronic businesses plans to migrate to SET by 1999.

MasterCard said that the digital wallet would be distributed as embedded software in the next version of Windows. However, Visa decided not to wait. Thus, Visa agreed to offer a credit card processing gateway embedded in the barebones SSL encryption protocol. Wells Fargo, one of the largest Web banking companies uses a SET-free payment processing service that adds certificates to SSL data encryption. The certificates are stored in smart cards that can be slipped into a special keyboard with a built-in slot.

1. Secure Socket Layer Protocol

Security schemes are adopted in protocols like SSL and SET. Since SET is established on top of SSL, understanding SSL is the foundation for understanding SET. The protocol Secure-HTTP (S-HTTP) applies SSL between Web servers and browsers, which communicate by HTTP protocol.

The SSL protocol performs message exchanges. Assume that the sender is Sally, and the receiver is Richard. The steps of the process are as follows:

1. At Sally's site, the message to be sent is hashed to a previously fixed length for message digest.
2. The message digest is encrypted with Sally's private signature key using an RSA algorithm, and the output is a digital signature.
3. The digital signature and Sally's certificate are attached to the original message. In the meantime, a secret key using the DES algorithm at Sally's computer, encrypts the bundle with the key.
4. The symmetric key is encrypted with Richard's public key, which resides in Richard's certificate, received in advance. The result is a digital envelope.
5. The encrypted message and digital envelope are transmitted to Richard's computer over the Internet.
6. The digital envelope is decrypted with Richard's private exchange key.
7. Using the restored secret key, the delivered message is decrypted to the message, digital signature, and Sally's certificate.
8. To confirm the integrity, the digital signature is decrypted by Sally's public key (that resides in Sally's certificate), obtaining the message digest.

2. Secure Electronic Transaction Protocol

A major question is “Is the encryption secure enough to protect confidentiality and authentication?” You may recall that the merchant in every offline credit card transaction has the customer’s credit card information. This implies that the credit card information may be abused. The same is true in Internet commerce. Here the risk is even greater, since hackers may read the card’s information while it travels on the Internet.

The risk of faked use of another person’s credit card is inherent unless a protocol can confirm the truthfulness of the cardholder on the other side of cyberspace. Can sending card information by fax, telephone, E-mail, or sealed envelope avoid this risk? Of course not. In fact, appropriate encryption techniques are the most secure protection against wiretapping during transmission.

Not only does security during transmission need to be resolved but also authentication of the cardholder. Even a password cannot completely eliminate risk if an ill-intentioned person has registered with a fake name. Consumers need to show an authenticating certificate that may be stored in a smart card so that counterfeiters cannot abuse the card information even though the information might have been exposed. This is what SET protocol is trying to achieve.

In the conventional credit card system, the process just described is only partially automated, in the sense that the disqualified card information is transmitted to the merchants on printed paper and requests for authorization are sometimes made by telephone (in many countries). Moreover, merchants have to mail the paper sales slips to the acquirer bank for capturing. However, the entire process must be fully automated on the Internet in a secure manner. That is why SET protocol was devised.

SET protocol has evolved since 1997. SET protocol meets the four security requirements for EC as SSL does: authentication, encryption, integrity, and non-repudiation. In addition, SET defines the message format, and procedure of message exchange. In SET protocol, there are four entities: cardholder, merchant, CA, and payment gateway. The roles of issuer, acquirer, and brand are beyond SET protocol specifications. The role of payment gateway is to connect the Internet and proprietary networks of banks. Each participating entity needs its own certificate. To keep the consumer’s certificate in his or her personal computer or IC card, software called the electronic wallet, or digital wallet, is necessary. To connect the digital wallet with various merchants, interoperability is a very important characteristic to meet.

Both SSL and SET involve the adoption of security schemes. Therefore, in the next section we will explain these schemes.

3. Security Schemes

The key security schemes adopted for electronic payment systems are encryption,

digital signature, message digest, and use of certificates and certifying authorities. We will briefly introduce these schemes.

1) Secret Key Cryptography

The secret key encryption scheme, is known as symmetric encryption, or private key encryption. The same key is used by a sender (for encryption) and a receiver (for decryption). The most widely accepted algorithm for secret key encryption is the Data Encryption Standard (DES). Some cryptographers believe that the DES algorithm is penetrable. However, DES is believed to be secure enough because penetration would take several years at a cost of millions of dollars. The SET protocol has adopted the DES algorithm with its 64-bit key. Note that the problem with a single key is that it needs to be transmitted to a counterpart.

2) Public Key Cryptography

Public key encryption, also known as asymmetric encryption, uses two different keys: a public key and a private key. The public key is known to all authorized users, but the private key is known only to one person-its owner. The private key is generated at the owner's computer and is not sent to anyone. To send a message safely using public key cryptography, the sender encrypts the message with the receiver's public key. This requires that the receiver's public key be delivered in advance. The message encrypted in this manner can only be decrypted with the receiver's private key. The most popular algorithm with public key cryptography is the RSA (Rivest, Shamir, and Adelman) algorithm with various key sizes, like 1,024 bits. This algorithm has never been broken by hackers, so it is seen as the safest encryption method known to date. Public key cryptography, RSA, is usually used to transmit the secret key of DES algorithm because the DES algorithm is more efficient and faster in handling encryption and decryption.

3) Digital Signature

Digital signature is used for the authentication of senders by applying public key cryptography in reverse. To make a digital signature, a sender (let's say Sally) encrypts a message with her private key. In this case, any receivers with her public key can read it, but the receiver can be sure that the sender is really the author of the message. A digital signature is usually attached to the sent message, just like the handwritten signature.

4) Message Digest

To make a digital signature, the base message needs to be normalized to a predetermined length of 160 bits, regardless of the length of the original message. This normalization process can be achieved by hashing the original message. This hashed message is called a message digest.

5) Certificates

A certificate usually implies an identifying certificate that is issued by a trusted third-party certificate authority (CA). A certificate includes records such as a serial number, name of owner, owner's public keys (one for secret key exchange as receiver and one for

digital signature as sender) an algorithm that uses these keys, certificate type (cardholder, merchant, or payment gateway), name of CA, and CA's digital signature.

6) Certificate Authority

A certificate authority is a body, either public or private, that seeks to fill the need for trusted third-party services in EC. A CA accomplishes this by issuing digital certificates that attest to certain facts about the subject of the certificate. VeriSign is one the pioneering CAs (VeriSign 1999). The U. S. Postal Service is expected to play a major role as a CA. A CA may be certified by another trusted CA, making a hierarchy of CAs.

7) Digital Envelope

Digital enveloping is the process of encrypting a secret key (like the one for DES) with the receiver's public key. The DES key encrypted in this manner is called a digital envelope, because the DES key should be opened first to decrypt the message contents with the key.

8) Transaction Certificate and Time Stamp

A transaction certificate attests to some fact about the conduct of a transaction that can be used to prevent repudiation. Similarly, a time stamp is a cryptographically unforgettable digital attestation that a document was in existence at a particular time. A CA may keep these evidences at the CA's computer upon the request of customers. The above security schemes include five security requirements;

1. A digital signature assures the sender's authentication and nonrepudiation.
2. At the receiver's site, the received message is hashed to generate a message digest and the digital signature is hashed to generate another message digest. By comparing these two message digests, integrity can be assured.
3. The DES algorithm along with the digital envelope using the RSA algorithm can assure secure encryption.
4. The receiver's certificate, which includes the secret-key exchange key, can assure the receiver's authentication and nonrepudiation.
5. The transaction certificate and time stamp stored in the third-party CA is the third-party evidence of authentication and nonrepudiation for both sender and receiver.

Reading Materials

How Does an Online Store Handle Credit Card Orders?

If you want to open an online store, you'll need a way to accept credit card orders. That's easier said than done—credit card transactions are a complex process, and scores of companies offer products that claim to handle the details for you. No matter what you do, however, you'll need three basic things to accept credit cards: a secure way to transmit the card number from the user's browser to your Web server, a merchant account with a bank, and payment processing software to link your Web server to the bank.

Security. The most popular way to transmit credit card data securely over the Web is with the secure socket layer (SSL) protocol. You (or your Web hosting provider) will need to use a Web server that supports SSL, and your customers' Web browser must also support SSL (most, if not all, do). You'll also need a digital certificate that identifies you as a legitimate business—these are available for a fee from companies such as VerSign and Thawte, and many hosting providers will handle this for you for a small fee.

Merchant accounts. You'll need a business account with your bank if you want to accept credit card orders. Most banks offer merchant accounts—the problem is figuring out which one offers the best price, which is typically a percentage of each credit card order you submit. Most banks charge higher fees for what they consider risky accounts, such as those with large numbers of charge backs or fraudulent charges.

Payment processing. This is where things get really tricky. Dozens of companies offer transaction processing software that sends the right information to everyone involved in the sale—your bank, the customer's bank, the bank issuing the credit card, and so on. But most banks work with a handful of the biggest companies, including Authorize. Net and CyberCash. Some processors lease their services to you for a monthly fee, while others combine a monthly fee with some percentage of your sales.

If all of this sounds complicated, don't worry—there are a number of firms that provide online businesses with e-commerce packages combining everything you need to accept credit cards. These companies can help you get an online merchant account, they take care of all the back-office transaction processing, and many even include services that allow you to create and manage your own online store. There is also the PayPal option, which circumvents most of these issues, although not everyone has a PayPal account.

Unit 12 Web Marketing

Text A Web Marketing Strategies

Increasingly, companies are classifying customers into groups and creating targeted messages for each group. The sizes of these targeted groups can be smaller when companies are using the Web in some cases, just one customer at a time can be targeted. New research into the behavior of Web site visitors has even suggested ways in which Web sites can respond to visitors who arrive at a site with different needs at different times.

Most companies use the term “marketing mix” to describe the combination of elements that they use to achieve their goals for selling and promoting their products and services. When a company decides which elements it will use, it calls that particular marketing mix its marketing strategy. Companies—even those in the same industry— try to create unique presences in their markets. A company’s marketing strategy is an important tool that works with its Web presence to get the company’s message across to both its current and prospective customers.

Most marketing classes organize the essential issues of marketing into the four Ps of marketing: product, price, promotion, and place. Product is the physical item or service that a company is selling. The intrinsic characteristics of the product are important, but customers’ perceptions of the product, called the product’s brand, can be as important as the actual characteristics of the product.

The price element of the marketing mix is the amount the customer pays for the product. In recent years, marketing experts have argued that companies should think of price in a broader sense, that is, the total of all financial costs that the customer pays (including transaction costs) to obtain the product. This total cost is subtracted from the benefits that a customer derives from the product to yield an estimate of the customer value obtained in the transaction. The Web can create new opportunities for creative pricing and price negotiations through online auctions, reverse auctions, and group buying strategies. These Web-based opportunities are helping companies find new ways to create increased customer value.

Promotion includes any means of spreading the word about the product. On the Internet, new possibilities abound for communicating with existing and potential customers. Companies are using the Internet to engage in meaningful dialogs with their customers using E-mail and other means. Companies are using even more communication techniques to promote their products.

For years, marketing managers dreamed of a world in which instant deliveries would

give all customers exactly what they wanted when they wanted it. The issue of place (also called distribution) is the need to have products or services available in many different locations. The problem of getting the right products to the right places at the best time to sell them has plagued companies since commerce began. Although the Internet does not solve all of these logistics and distribution problems, it can certainly help. For example, digital products (such as information, news, software, music, video, and e-books) can be delivered almost instantly on demand through the Internet. Companies that sell products that must be shipped have found that the Internet gives them much better shipment tracking and control than did previous information technologies.

1. Product-based Marketing Strategies

You have learned about the importance of a company's Web presence and how this presence must integrate with the brand or other established images the company uses in its promotional activities. Most companies offer a variety of products that appeal to different groups. When creating a marketing strategy, managers must consider both the nature of their products and the nature of their potential customers.

Managers at many companies think of their businesses in terms of the products and services they sell. This is a logical way to think of a business because companies spend a great deal of effort, time, and money to design and create those products and services. If you ask managers to describe what their companies are selling, they usually provide you with a detailed list of the physical objects they sell or use to create a service. When customers are likely to buy items from particular product categories, or are likely to think of their needs in terms of product categories, this type of product-based organization makes sense. Most office supplies stores on the Web believe their customers organize their needs into product categories. For example, the Staples home page uses product categories as a very strong organizing theme.

The Staples page has tabbed headings near the top of the page that are links to product categories. More detailed product category links fill the center of the page. Staples designed its page to meet the needs of the customer who has a specific product category in mind. Even the search box near the top of the page includes a drop-down list of categories so that customers can narrow their searches within categories.

A company that sells to a different market, but that uses a similar product-based marketing strategy, is Sears. Sears sold its products through catalogs and later in physical stores for many years before opening its Web site. Most companies that used print catalogs in the past organized them by product category. For example, Sears has carried over its product-focused marketing strategy to its Web site.

Both of these companies are using a product-based strategy. They organized their Web sites from an internal viewpoint, that is, according to the way that they arranged their product design and manufacturing processes. If customers arrive at these Web sites

looking for a specific type of product, this approach works well. Alternatively, customers who are looking to fulfill a specific need, such as outfitting a new sales office or choosing a graduation gift, might not find these Web sites as useful. Many marketing researchers and consultants advise companies to think as if they were their own customers and to design their Web sites so that customers find them to be enabling experiences that can help customers meet their individual needs.

2. Customer-Based Marketing Strategies

You have learned that the Web creates an environment that allows buyers and sellers to engage in complex communications modes. The communication structures on the Web can become much more complex than those in traditional mass media outlets such as broadcast and print advertising. When a company takes its business to the Web, it can create a Web site that is flexible enough to meet the needs of many different users. Instead of thinking of their Web sites as collections of products, companies can build their sites to meet the specific needs of various types of customers.

A good first step in building a customer-based marketing strategy is to identify groups of customers who share common characteristics. Sabre Holdings is a company that sells marketing services and technology to support those services to the travel industry. Its customers include travel agencies, airlines, large companies that have in-house travel departments, and travel consolidators (companies that buy blocks of airline seats and hotel rooms, then resell them as vacation packages). Sabre also operates the Travelocity B2C travel site. The Sabre Holdings home page includes links to separate sections of its site that are designed to meet the needs of each of its major customer groups. By following these links, Sable's different customers can find specific products and services targeted to each of their needs.

Although Sable's approach of breaking customers into four main groups is a good first step, subgroups probably exist within each of those groups. Marketers can use their experience with selling in their industries to identify those subgroups and then develop marketing strategies and tactics that will effectively reach customers in each subgroup. The use of customer-based marketing approaches was pioneered on B2B sites. B2B sellers were more aware of the need to customize product and service offerings to match their customers' needs than were the operators of B2C Web sites. In recent years, B2C sites have increasingly added customer-based marketing elements to their Web sites. One of the most noticeable trends in this direction is in university Web sites. In the early days of the Web, university sites were usually organized around the internal elements of the school (such as departments, colleges, and programs). Today, most university home pages include links to separate sections of the Web site designed for specific stakeholders, such as current students, prospective students, parents of students, potential donors, and faculty.

New Words

1. electron [i'lektrən] *n.* 电子
2. subtract [səb'trækt] *v.* (～ from) 减去, 减
3. derive [di'raiv] *v.* 得自, 源自; 起源
4. yield [ji:ld] *v.* 出产, 生长, 生产
v. (～ to) 屈服, 屈从
n. 产量, 收益
5. negotiation [ni:gəʊfi'eɪʃən] *n.* 商议, 谈判, 流通
6. auction ['ɔ:kʃən] *n.* 拍卖
v. 拍卖
7. appeal [ə'pi:l] *n.* 请求, 呼吁, 上诉, 吸引力, 要求
v. 求助, 诉请, 要求
8. alternatively [ɔ:l'tə:nətivli] *adv.* 作为选择, 二者择一地
9. consultant [kən'sʌltənt] *n.* 顾问, 商议者, 咨询者
10. flexible ['fleksəbl] *a.* 柔韧性, 灵活的, 可通融的
11. consolidator [kən'sɒlɪdeɪtə] *n.* 并装业者, 混载业者
12. subgroup ['sʌbgru:p] *n.* 小群, 隶属的小组织, 子群
13. tactics ['tæktiks] *n.* 战术, 策略
14. donor ['dəʊnə] *n.* 捐赠人
15. faculty ['fækəlti] *n.* 全体教师

Notes about Terms

1. Web site: 网络站点。

2. Marketing mix: 营销组合, 早在 1953 年, 美国营销学者鲍顿就提出了“市场营销组合”概念, 1960 年, 20 世纪营销学权威之一的杰罗姆·麦肯锡博士在其《基础营销学》第 1 版中首次提出了营销组合的 4P 战略。而 4P 所指的是产品(Product)、渠道(Place)、价格(Price)、促销(Promotion), 以及它们的组合。

3. Online auction: 在线拍卖。

4. Reverse auction: 反向拍卖, 是通过第三方电子商务供应商邀请供应商在网上出价, 并争相降价的拍卖方式。供应商不断报出低价, 直到厂商选定一家满足其价格要求和售后服务要求的供应商。

5. Digital products: 数字产品, 是指在网络经济中交易的可以被数字化——即编码成一段字节, 并且可以通过网络来传播的事物。

6. Staples: 美国 Staples 公司是全球领先的办公用品零售和分销公司, 在全球有 1600 余家办公用品超市和仓储分销中心, 客户范围从 500 强企业到中小公司及个人用户。2004 年, Staples 被《美国商业周刊》列为 S&P500 股指表现最优的 50 家公司中的第 39 名, 并排名全球 500 强第 152 位。

7. Sears: 是一家已有 110 年历史的美国连锁百货公司。
8. Product-based marketing strategies: 产品导向型市场策略。
9. Customer-based marketing strategies: 客户导向型市场策略。

Notes about Sentences

This total cost is subtracted from the benefits that a customer derives from the product to yield an estimate of the customer value obtained in the transaction.

客户在交易中所获得的价值的估计值等于客户从所购买商品中获得的利益减去总成本。

Exercises

I. Fill the blanks according to the text.

Most companies use the term “marketing mix” to describe the combination of elements that they use to achieve their goals for 1 and 2 their products and services. When a company decides which elements it will use, it calls that particular marketing mix its 3 strategy. Companies—even those in the same industry—try to create unique presences in their markets. A company’s marketing strategy is an important tool that works with its 4 presence to get the company’s message across to both its current and 5 customers.

Most marketing classes organize the essential issues of marketing into the 6 Ps of marketing: product, price, 7, and place. Product is the physical item or service that a company is selling. The intrinsic characteristics of the product are important, but customers’ perceptions of the product, called the product’s 8 can be as important as the actual characteristics of the product.

II. Translate the following sentences into Chinese.

1. The price element of the marketing mix is the amount the customer pays for the product.
2. This total cost is subtracted from the benefits that a customer derives from the product to yield an estimate of the customer value obtained in the transaction.
3. Promotion includes any means of spreading the word about the product.
4. The problem of getting the right products to the right places at the best time to sell them has plagued companies since commerce began.
5. Managers at many companies think of their businesses in terms of the products and services they sell.

III. Translate the following sentences into English.

1. 电子商务可为企业提供大量新的商场机会,企业可以通过电子商务广泛、方便地开展商务活动。
2. 企业可以利用网络开展与国际市场的对话,开发国际市场。
3. 以网站和电子商务为代表的新经济将使未来经济全球化、网络化。

4. 互联网可以跨地区、跨领域,超越时间和空间,攻破了国家及地区有形和无形的壁垒。
5. 电子商务流程则同时既能加强这种互相依存的关系,又使得供应商更容易、更迅捷地为企业提供服务。

IV. Answer the following questions.

1. What is a broader sense of price and where is that price derived?
2. In order to build a customer-based marketing strategy, what should be the first step?

Text B Protection of Intellectual Property in Online Business

Online businesses must be careful in their use of intellectual property. Intellectual property is a general term that includes all products of the human mind. These products can be tangible or intangible. Intellectual property rights include the protections afforded to individuals and companies by governments through governments' granting of copyrights and patents, and through registration of trademarks and service marks. Online businesses must take care to avoid deceptive trade practices, making false advertising claims, engaging in defamation or product disparagement, and violations of intellectual property rights by using unauthorized content on their Web sites or in their domain names.

Web Site Content Issues

A number of legal issues can arise regarding the Web page content of electronic commerce sites. The most common concerns involve the use of intellectual property that is protected by other parties' copyrights, patents, trademarks, and service marks.

1. Copyright Infringement

A copyright is a right granted by a government to the author or creator of a literary or artistic work. The right is for the specific length of time provided in the copyright law and gives the author or creator the sole and exclusive right to print, publish, or sell the work. Creations that can be copyrighted include virtually all forms of artistic or intellectual expression—books, music, artworks, recordings (audio and video), architectural drawings, choreographic works, product packaging, and computer software. In the United States, works created after 1977 are protected for the life of the author plus 70 years. Works copy righted by corporations or not-for-profit organizations are protected for 95 years from the date of publication or 120 years from the date of creation, whichever is earlier.

The idea contained in an expression cannot be copyrighted. It is the particular form in which an idea is expressed that creates a work that can be copyrighted. If an idea cannot be separated from its expression in a work, that work cannot be copyrighted. For example, mathematical calculations cannot be copyrighted. A collection of facts can be copyrighted, but only if the collection is arranged, coordinated, or selected in a way that causes the resulting work to rise to the level of an original work. For example, the Yahoo!

Web Directory is a collection of links to URLs. These facts existed before Yahoo! selected and arranged them into the form of its directory. However, most copyright lawyers would argue that the selection and arrangement of the links into categories probably makes the directory copyrightable.

In the past, many countries (including the United States) required the creator of a work to register that work to obtain copyright protection. U.S. law still allows registration, but registration is no longer required. A work that does not include the words “copyright” or “copyrighted”, or the copyright symbol? and that was created after 1977, is copyrighted automatically by virtue of the copyright law unless the creator specifically released the work into the public domain.

Most Web pages are protected by copyright because they arrange the elements of words, graphics, and HTML tags in a way that creates an original work. This creates a potential problem because of the way the Web works. As you learned in Chapter 2, when a Web client requests a page, the Web server sends an HTML file to the client. Thus, a copy of the HTML file (along with any graphics or other files needed to render the page) resides on the Web client computer. Most legal experts agree that this copying is a fair use of the copyrighted Web page. The U.S. copyright law includes an exemption from infringement actions for fair use of copyrighted works. The fair use of a copyrighted work includes copying it for use in criticism, comment, news reporting, teaching, scholarship, or research. The law’s definition of fair use is intentionally broad and can be difficult to interpret. When you make fair use of a copyrighted work, you must be careful to provide a citation to the original work to avoid charges of plagiarism.

Copyright law has always included elements, such as the fair use exemption, that make it difficult to apply. The Internet has made this situation worse because it allows the immediate transmission of exact digital copies of many materials. In the case of digital music, the Napster site provided a network that millions of people used to trade music files that they had copied from their CDs and compressed into MPEG version 3 format, commonly referred to as MP3. This constituted copyright violation on a grand scale, and a group of music recording companies sued Napster for facilitating the violations.

Napster argued that it had only provided the “machinery” used in the copyright. Violations and had not itself infringed on any copyrights. But the Courts held that Napster was guilty of vicarious copyright infringement, even though it did not directly violate any music recording companies’ copyrights. Thus Napster was held liable even though Napster itself did not transfer any copies. The courts ordered that Napster be shut down. In late 2001, Napster agreed to pay \$26 million in damages for copyright infringement to a group of music publishing associations.

With the growth in popularity of portable music devices such as Apple’s iPod, the demand for music in the MP3 (and similar) formats has continued to increase. The companies that sell music downloads, such as the new Napster site and Apple’s iTunes

site, each have different rules and restrictions that come with the downloaded files. Some sites allow one copy to be installed on a portable music device. Others allow a limited number of copies to be installed. Still others allow unlimited copies, but only if the devices on which the copies are installed are owned by the person who downloaded the file.

2. Patent Infringement

A patent is an exclusive right granted by the government to an individual to make, use, and sell an invention. In the United States, patents on inventions protect the inventor's rights for 20 years. A patent on the design for an invention provides protection for 14 years. To be patentable, an invention must be genuine, novel, useful, and not obvious given the current state of technology. In the early 1980s, companies began obtaining patents on software programs that met the terms of the U. S. patent law. However, most firms that develop software to use in Web sites and for related transaction processing have not found the patent law to be very useful. The process of obtaining a patent is expensive and can take several years. Most developers of Web-related software believe that the technology in the software could become obsolete before the patent protection is secured.

One type of patent has been of interest to companies engaging in electronic commerce. A U. S. Court of Appeals ruled in 1998 that patents could be granted on "methods of doing business". The business process patent, which protects a specific set of procedures for conducting a particular business activity, is quite controversial. In addition to the Amazon. com patent on its 1-Click purchasing method, other Web businesses have obtained business process patents. The Priceline. com "name your own price" price-tendering system, About com's approach to aggregating information from many different Web sites, and Cybergold's method of paying people to view its Web site have each received business process patents.

The ability of companies to enforce their rights under these patents is not yet clear. Many legal experts and business researchers believe that the issuance of business process patents grants the recipients unfair monopoly power and is an inappropriate extension of patent law. In 1999, Amazon. com sued Barnes & Noble for using a process on its Web site that was similar to the 1-Click method. The case was settled out of court in 2002, but the terms of the settlement were not disclosed. The U. S. Supreme Court has not yet ruled on any cases involving business process patents. To read an interesting discussion of both sides of the business process patent issue that includes exchanges between Jeff Bezos, founder of Amazon. com, and book publisher Tim O'Reilly, see the article posted at My Conversation with Jeff Bezos.

3. Trademark Infringement

A trademark is a distinctive mark, device, motto, or implement that a company

affixes to the goods it produces for identification purposes. A service mark is similar to a trademark, but it is used to identify services provided. In the United States, trademarks and service marks can be registered with state governments, the federal government, or both. The name (or a part of that name) that a business uses to identify itself is called a trade name. Trade names are not protected by trademark laws unless the business name is the same as the product (or service) name. They are protected, however, under common law. Common law is the part of British and U. S. law established by the history of court decisions that has accumulated over many years. The other main part of British and U. S. law, called statutory law, arises when elected legislative bodies pass laws, which are also statutes.

The owners of registered trademarks have often invested a considerable amount of money in the development and promotion of their trademarks. Web site designers must be very careful not to use any trademarked name, logo, or other identifying mark without the express permission of the trademark owner. For example, a company Web site that includes a photograph of its president who happens to be holding a can of Pepsi could violate Pepsi's trademark rights. Pepsi can argue that the appearance of its trademarked product on the Web site implies an endorsement of the president or the company by Pepsi.

Reading Materials

Keyword Research

By Lee Odden

One of the first tasks of a search engine optimization or marketing campaign is to conduct keyword research.

Achieving high rankings for keyword phrases no one is looking for is pretty much a waste of time. Yet company web masters and marketing staff doing it all the time. Someone on the management team, in sales or marketing dictates the keyword phrases with no research, the site is optimized, linked and rankings ensue. But traffic performance is disappointing. Site visits are high, but conversions/inquiries are low. Inspection of the server referrer logs reveals the site is getting traffic from search engine queries, but on phrases un-related to the website's offering. Understanding your customer is basic marketing. However, many companies assume their prospective customers behave online as they do offline, using the same terminology as is printed in brochures, print advertising and direct mail. But that's not the case. When you search for a new home to buy, would you visit Google and enter, "new Chicago home with majestic views and contemporary styling". Or would it be something else?

Gaining insight into how your customers search is critical for effective marketing online. Your ad department or agency might be able to write copy that evokes an emotional response with your prospective customers, but those are concepts being pushed. Search engine marketing is about pull. You are pulling your customers in through search engine visibility on terms that are congruent with their thought process. Push communications try to convince your prospects they need your service/product. Pull communications involve attracting customers who are already looking for your type of service/product.

Search term selection varies based on the customer's stage in the search process. Customers in an early stage of search might use broader terms. After reviewing initial results, customers develop some initial preferences and begin to consider different options with more specific queries. Once the customer has learned enough about the different options available, the queries get very specific, 3-4 or more words. How do you know what phrases your prospective customers might be using?

Pick your keyword phrases wisely. There is no perfect keyword selection tool for organic search engine rankings. But there are several tools provide very valuable insight into the type of search terms people are using in your category. Wordtracker is one of those tools. You can get a sampling of search terms for free or use their paid service to get

unlimited access. The data from Wordtracker comes from searches performed by several meta engines. Meta search engines aggregate search results from many of the top search engines into one set of search results. Other tools include Yahoo Search Marketing's keyword selection tool and Google has a keyword sandbox.

Keyword selection is a process. Start with phrases that describe your service or product. If possible, it's also useful to ask a few of your customers what words they would use to search for your type of business. Using this initial list of keyword phrases, you can conduct research using the keyword selection tools mentioned above to identify any other phrases you missed and how popular they are. It can be very revealing to find out different formations of keyword phrases are more popular than your original list.

Identify the keyword phrases that best match your product/service with significant popularity levels and decide on a target list of phrases. Use your target keyword list will influence many aspects of your website including categorization, page titles, meta data, content and internal linking.

Focus on the right mix of keywords and you can realize a significant improvement in site inquiries and conversions.

Unit 13 Electronic Commerce and Information Economy

Text A The Evolving Information Economy

The information economy is based ultimately upon the increased salience of information as a commercial tool. How information resources are utilized by enterprises is becoming increasingly central to their competitiveness. This highlights the importance of information and communication technologies (ICTs) as key enabling tools in this process of commercial and technological change—something that has its most potent expression in the growth of the Internet. Here, we discuss the core trends and developments associated with the emergence of the information economy.

The nature of the information economy

The development of the information economy is closely associated with the process of economic transformation within modern economies. Negroponte highlights that this economic transformation is about shifting wealth creation from the creation of atoms (eg. manufactured goods) towards the creation of goods and services based upon digital bits. Figure 1 underlines the core characteristics of this paradigm shift, highlighting how the development of the information economy has the potential to alter substantially all aspects and features of the commercial environment. This figure shows that the information economy/ through the increased use of information (and associated technologies) by businesses (and other users), creates new industrial structures/patterns and trends, as well as new services and products. Arguably the most important of these changes is the transition from a market-place (a single place where buyers and sellers meet) to a market space where commercial transactions take place over a broader area without the need for physical contact. This has the potential to alter fundamentally all aspects of the prevailing business model. It is likely to push firms towards organizational structures based on networks and away from the traditional form based on hierarchies; it will also require new skills from its work-force (see below) and alter markedly logistical processes. The other notable feature of the enterprise in the information economy is how the resource base is expected to alter as there is a move away from scarcity to excess (driven by the fact that digital bits can be endlessly reproduced).

Paranov and Yakovleva (1998) perceive that the information economy is about four main processes:

1. the growth of Internet technologies and applications;
2. the growth of economic ‘settlers’ on the Internet (notably through electronic commerce);

3. the emergence of network forms of organizational design;
4. the development of network forms of institutional design (notably for the purposes of trade/ finance and labor).

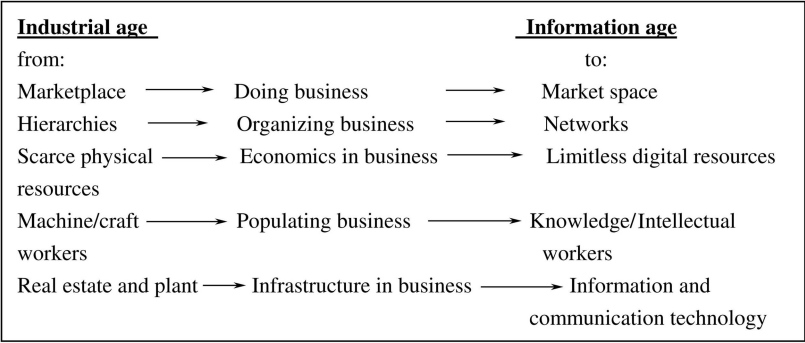


Figure 1 The shift from the industrial to information age

Importantly, Paranov and Yakovleva highlight the pivotal role that the Internet will play in the evolution and establishment of the information economy. Indeed the Internet is gradually evolving towards an open free-market economy of automated agents selling an assortment of tangible and intangible commodities as well as using it as a medium to sell goods and services through more traditional means. These changes also extend to logistical processes (for example, to improvements in the distribution and marketing processes) as information and associated technologies become ever more salient.

The key issue is that the evolution of the information economy creates a demand for new products and services to improve and increase the efficiency and effectiveness of commercial processes—a trend that is becoming fairly ubiquitous. The evolution of the information economy creates a demand for new products and services to improve and increase the efficiency and effectiveness of commercial processes—a trend that is becoming fairly ubiquitous. This trend has been emphasized in a recent survey by BT, which indicated that over 90 percent of enterprises see the pace of technological development as one of the main drivers of commercial change, with 88 percent believing that up-to-date technology usage is essential for sustaining business competitiveness. Additionally, over 82 per cent of businesses surveyed perceived information to be the main strategic weapon of the next decade, with 90 per cent of businesses feeling that telecommunications (and other information and communications technologies) will become ever more important in supporting their relationship with customers and suppliers. The broad strategic impact of the development of the information economy for the commercial environment, derived from Tap Scott (1995), includes the following issues:

- the central role played by knowledge in wealth creation;
- the emergence of digital workers;
- the role of digital technology as the key enabler;

- the rise of virtual economic activity, as commercial relationships can be conducted over greater geographical distances;
- the rise of molecularization as organizations become disaggregated under the application of ICTs;
- the network as increasingly central to economic activity;
- the rise of disintermediation as networks cut out the middleman;
- the convergence of technologies within content, IT and telecommunications sectors;
- the increased prominence of innovation in business performance;
- a blurring between the respective roles of consumers and producers;
- commercial activity tending to be more immediate;
- global economic activity predominating.

It is important to stress that the information economy is not a synonym for the commercial evolution of the Internet—it is about more than the commercial impact of a single technology. The information economy is also about (amongst other things) the emergence of ICTs in the physical production process, and ancillary services and products (such as outsourcing) that facilitate network usage and value, and give rise to the commercial issues highlighted in the above list. Consequently, the processes involved in the development of the information economy involve firms looking at the current commercial environment and examining how the application of ICTs can improve it. It is important to underline that the information economy is not simply some mass information vision; it is a pragmatic response to the needs of business and economies in an era when knowledge and information are key determinants of commercial success.

New words

1. salience ['seiliəns, -jəns] *n.* 显著, 卓越, 明显, 突出, 突起
2. enterprise ['entəpraiz] *n.* 企业, 事业, 计划, 事业心, 进取心, 干事业
3. substantially [səb'stænfəli] *adv.* 充分地, 大量地
4. scarce [skeəs] *a.* 缺乏的, 不足的, 稀有的, 不充足的
5. arguably ['a:gjuəbli] *adv.* 可论证地, 可争议地
6. prevailing [pri'veiliŋ] *a.* 占优势的, 主要的, 流行的
7. hierarchy ['haiəra:ki] *n.* 层次, 层级
8. markedly *adv.* 显著地, 明显地
9. pivotal ['pivətl] *a.* 枢轴的, 关键的
10. assortment [ə'sɔ:tmənt] *n.* 分类
11. commodity [kə'mɒditi] *n.* 日用品
12. ubiquitous [ju:'bikwitəs] *a.* 到处存在的, (同时)普遍存在的
13. highlighting *n.* (为加强对一个摄影主题的强光照射而增加的)辅助照明, 加强
14. pragmatic [præg'mætik] *a.* 国事的, 团体事务的, 实际的, 注重实效的

15. molecular [məu'lekjulə] *a.* [化]分子的, 由分子组成的
16. disaggregate [dis'ægrigeit] *v.* 使崩溃, 分解, 聚集
17. predominate [pri'dəmineit] *v.* 掌握, 控制, 支配
v. 统治, 成为主流, 支配, 占优势

Notes about Terms

1. information economy: 信息经济, 是伴随信息时代的到来而出现的经济形态, 一般认为是指以生产、获取、处理和应用信息为主的经济。
2. industrial age: 工业时代。
3. information age: 信息时代。
4. IT (Information Technology): 信息技术, 包含现代计算机、网络、通信等信息领域的技术。

Exercises

I. Fill in the blanks according to the text.

The development of the information economy is closely 1 with the process of economic transformation within modern economies. Negroponte 2 that this economic transformation is about 3 wealth creation from the creation of atoms towards the creation of goods and services based upon digital bits. Figure1 shows the core characteristics of this paradigm shift, highlighting how the development of the information economy has the potential to alter 4 all aspects and features of the commercial environment.

Arguably the most important of these changes is the 5 from a market-place (a single place where buyers and sellers meet) to a market space where commercial transactions take place over a 6 area without the need for physical contact. This has the potential to alter 7 all aspects of the 8 business model. It is likely to push firms towards organizational structures based on networks and away from the traditional form based on 9; it will also require new skills from its work-force and alter markedly logistical processes. The other notable feature of the enterprise in the information economy is how the resource base is expected to alter as there is a move away from 10 to excess (driven by the fact that digital bits can be endlessly reproduced).

II. Translate the following sentences into Chinese.

1. The information economy is based ultimately upon the increased salience of information as a commercial tool.
2. It is likely to push firms towards organizational structures based on networks and away from the traditional form based on hierarchies.
3. The key issue is that the evolution of the information economy creates a demand for new products and services to improve and increase the efficiency and effectiveness of commercial processes.
4. It is important to stress that the information economy is not a synonym for the

commercial evolution of the Internet—it is about more than the commercial impact of a single technology.

5. It is a pragmatic response to the needs of business and economies in an era when knowledge and information are key determinants of commercial success.

Ⅲ. Translate the following sentences into English.

- 1. 企业如何利用信息资源越来越成为提高其竞争力的核心。
- 2. 这一点可能会从根本上改变现行企业模式的各个方面。
- 3. 在信息经济里,企业的另一个显著特征是预计如何改变资源来源。
- 4. 因为信息及其有关的科技变得比以往任何时候都重要,所以这些变化也会延伸到物流加工。
- 5. 90%的企业认为电信在支持其与顾客和供应商的关系中将会比以往任何时候更加重要。

Ⅳ. Answer the following questions.

- 1. What's the nature of the information economy?
- 2. What are the core trends of the information economy?

Text B The Information Economy and Competitive Advantage of Enterprises: A Value Chain Analysis

The framework of the value chain puts the impact of the information economy upon enterprise functioning and performance. It suggests that changes in efficiency and human resource requirements occur because of changes within the industry value chain in which the enterprise operates. The essence of the value chain is that an enterprise takes inputs from suppliers to which it adds value' (in the context of the information economy/ through the application of knowledge and information resources and associated technologies) to create outputs that are eventually consumed by others. The typical, simplified value chain is identified in Figure 2.

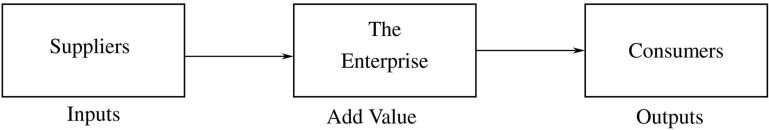


Figure 2 The simplified value chain

The essential theme of the value chain is one of securing competitive advantage through managing suppliers/assessing the requirements of consumers and adjusting internal processes as appropriate. The latter inevitably needs an assessment of the enterprise's core competencies and internal functioning in relation to the themes highlighted above. The value an enterprise creates is measured by the amount buyers are prepared to pay for its product. Thus a business is profitable if the value it creates exceeds

the cost of performing these activities. Consequently to gain competitive advantage an enterprise must either perform these activities at lower costs (through using ICTs to improve efficiency) or perform them in an innovative manner (through the utilization of improved knowledge resources).

Porter (1985) divides the value chain internally into five primary activities and four supporting activities. The five core activities are:

1. inbound logistics—all activities linked to receiving, storing and handling inputs into the production process;
2. operations—all activities involved in the transformation of inputs into outputs such as machinery, assembly, testing and facilities management;
3. outbound logistics—processes involved in moving the output from operation to end user (including movement, ordering, warehousing, etc.);
4. marketing and sales—the process of inducing purchase and enabling those who wish to buy to do so (includes activities such as advertising, distribution channels, etc.);
5. service—activities involved in the provision of a service to buyers, offered as part of the purchase agreement (includes spare parts supply, repair facilities, etc.).

The four support activities (designed to support the primary functions) are:

1. firm infrastructure—includes accounts, finance and quality management;
2. human resource management—includes all functions involved in the process of staffing the enterprise from training through to rights;
3. technology development—the development of technology to support new product development and stimulate new process improvements;
4. procurement—the process of attaining the enterprise's inputs.

It is already evident that, across these primary and support activities, the application of ICTs is having a tangible effect (in addition to the production and human resources concerns noted above) upon enterprise performance—indeed it is difficult to identify an area where business functioning does not now depend to a greater or lesser extent upon information and the application of ICTs. It is worth noting by way of illustration that there have been impacts upon advertising (for example, through improved knowledge about Customers), the nature of shopping (there are anticipated increase in distance shopping) and logistics (via lower distribution costs). In addition, it is felt that the application of these technologies will (as mentioned) lower entry barriers, generate more efficient markets (through the better allocation of resources) and increase the pressure upon intermediaries and agents. It is also already evident that ICTs are having an impact upon operations through the development of computer-aided design and manufacturing, which is having a tangible effect upon the speed of production cycles, improving the quality of output and lowering the time it takes for new products to reach the marketplace. The impact upon distribution systems is also evident/as the application of ICTs is reducing the time needed to process orders as well as reducing the need for large inventories. In

terms of marketing and sales, it is also apparent that a “digital” shop front is much cheaper to maintain than a physical one, and is able, through Internet technology to open all hours and reach the global market-place. Finally the application of these technologies will have an impact upon corporate structure, the nature of human resources and the location of commercial activities. The support activities (aside from the human resources) are also affected, through the rise of electronic tendering, the need to develop a supporting electronic infrastructure and the application of the correct technology to support the changing information requirements of the enterprise’s primary activities.

These reinforce a trend where speed to the market is becoming more important as part of the process of securing competitive advantage, a phenomenon that relies in no small part upon the better use of information. The aim is to lower the unnecessary cost and waste out of the value chain. The savings realized from the improvements in knowledge can be utilized to fund further process enhancement as well as improved products and lower prices. These processes are all core to the enterprise delivering better value added to its customers. These changes, as well as the constant reappraisal of processes and techniques, are necessary in an era of intensifying competition. Strategy therefore constantly has to assess the nature and function of the value chain.

These trends underline the increasingly pivotal role of information in the value chain, which increasingly is not merely about the physical flow of goods and services within and between linked enterprises but is also about the information that flows within and between them. It is evident that branding, customer allegiance and employee loyalty amongst others all depend upon information of various sorts. Supplier relationships are by their very nature based upon channels of communication founded upon the exchange of information. Within these relationships/information can determine the relative bargaining power of the players. Very often one party or the other can gain increased value from the existence of asymmetry of information. In these instances, and where enterprises have better information systems and processes than their rivals, the existence of information can be used as a key determinant of competitive advantage. New advantages will emerge when the value chain, as it is currently developed, deconstructs and is fragmented into multiple businesses, each seeking to define its own competitive advantage. This process is symptomatic of the emergence of a virtual value chain (see the lower segment of Figure 3).

The development of a virtual value chain is, as the name suggests, value creation through interactions over the network (via the exchange of information) rather than through direct contact as typified by the traditional value chain. The virtual value chain is essentially the process whereby raw information is transformed into products, delivering value to users through electronic means. It is already evident that information within traditional value chains has had something of a supporting role, acting as a facilitator and often not as a source of value in its own right (for example, in areas such as marketing). Figure 3 indicates a number of things. First, it highlights the process of value creation in the production of information-based goods. Clearly the virtual value chain is mirroring the

physical value chain as information is collected, processed, packaged and moved to the end user. Second, the growing importance of information means that processes within the virtual value chain can supersede those within the more traditional equivalent. For example, the network can offer alternative means of distribution and can also fundamentally alter aspects of the supply chain. This leads to a third (and final) point, that the virtual value chain is more a complement to the existing value chain than its replacement—there are emerging interlinkages between the two value chains. There are evident interlinkages between the virtual and physical value chains in terms of functional areas such as marketing and sales. Over time, as new markets are created and as more and more aspects of the two value chains become interdependent, it is possible to foresee their integration. Overall, the virtual value chain only applies to information businesses, which rely on these technological methods for their business models. For other enterprises, the virtual value chain is an important source of competitive advantage through using information collected as a complement to existing physical processes—a process also highlighted in Figure 3.

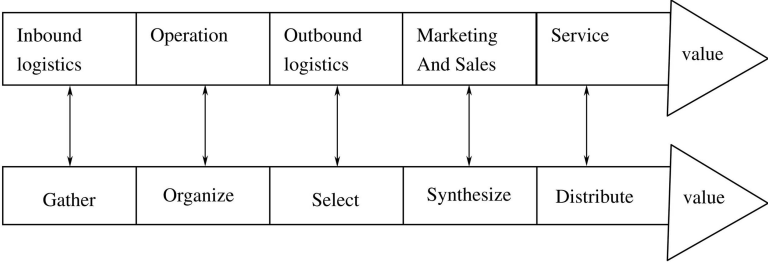


Figure 3 The new value chain

Information can evidently be captured at all stages of the virtual value chain and used to enhance the performance of the enterprise. This information need not be used merely to aid existing processes but can also be repackaged and analyzed to build content-based products or new lines of business. For example, supermarkets are using their customer information in developing banking or other specialized customer products. This not only enables the enterprise to generate loyalty amongst its customers but can also assist it in reaching out to its competitors’ customers. The result is to rearrange the value system to create growing interlinkages between various, previously separate, sectors (for example, in the case mentioned above, banking and food retailing)—a variation of the process of convergence most evident in the information industry.

The growing use of information and the development of the virtual value chain allow inter-enterprise relationships to expand with added value being generated through alterations to this network to maximize flexibility, speed, innovation and responsiveness (these are evident in terms of the development of virtual enterprises and the impact upon supply chain management noted below). Thus the capabilities of the enterprise to use and share information of common commercial interest create an inter-dependent network of

enterprises whose efficiency can work to the advantage of all parties. The development of such networks (within the context of the wider application of ICTs) as the source of value added is, according to Tapscott (1995), creating new dynamics in terms of:

- improving the accessibility of partners;
- establishing new interdependencies between enterprises;
- creating competitive advantage through co-operation;
- value creation through inter-organizational partnerships;
- speeding up inter-organizational transactions.

These trends highlight that the flow of information along the value chain between the enterprise, its suppliers and its customers can be utilized to ensure that efficiencies and competitiveness are realized. On the supply side, sharing information with suppliers brings obvious benefits to both in terms of efficiency of delivery and avoidance of over-stocking, and is a complement to just-in-time production techniques. Bringing the customer into the enterprise's value chain offers advantages in terms of requiring fewer resources for enterprise functioning, increased speed for the re-engineering of products to meet customer needs, the enabling of mass customization and the avoidance of supply problems, as products can be relayed to the customer quickly and easily. The success of these systems to the competitiveness of enterprises relies upon emphasizing the customer as the key driver of the system. Most businesses have focused upon the supply chain within the logistical system in terms of the use of extranet technologies, as this is where they generally exert more influence, but evidently sustaining competitive advantage means integrating consumers.

The above trends indicate that the impact of information upon the value chain (in both its physical and virtual forms) is creating a situation where enterprises are increasingly part of a wider value system. This wider stream of activities, of which the enterprise's value chain is part, consists of the value chains of suppliers through to those of its customers. This system creates interdependence between enterprises and (as noted below) can become a source of competitive advantage in its own right. The external value system is reflected in Figure 4.

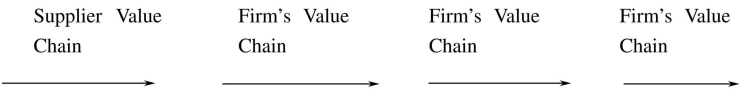


Figure 4 The external value system

What this underlines is that the enterprise is part of a network of mutually interdependent value chains, and it highlights how important the virtual chain value can be in allowing information to be utilized effectively to ensure that full competitive advantage is realized from these interdependencies. The virtual value chain should increase the efficiency of these relations through, for example, an enterprise being made aware early of change in the supply of components so that it can then source them elsewhere.

Reading Materials

E-Commerce in the Digital Economy

“The newest innovations, which we label information technologies, have begun to alter the manner in which we do business and create value, often in ways not readily foreseeable even five years ago.”

Alan Greenspan
Chairman, Federal Reserve Board

Two facets of the “digital economy”, electronic commerce (i. e. , business processes which shift transactions to the Internet or some other non-proprietary, Web-based system) and the information technology (IT) industries that make e-commerce possible, are growing and changing at breathtaking speed. Not only were we unable to foresee five years ago how advances in information technology would “alter the manner in which we do business and create value”, but the rate of change is racing ahead of estimates that only a year ago appeared optimistic. This chapter looks at the dimensions and growth of e-commerce, while the following chapters examine IT industries and their impact on various facets of the U. S. economy.

The value of e-commerce transactions, while still small relative to the size of the economy, continues to grow at a remarkable rate. More significant than the dollar amount of these transactions, however, are the new business processes e-commerce enables and the new business models it is generating. Both the new Internet-based companies and the traditional producers of goods and services are transforming their business processes into e-commerce processes in an effort to lower costs, improve customer service, and increase productivity.

Driven by customer demand and business imperatives, the digital economy is becoming truly global. The United States continues to lead the world in many measures of the utilization of digital technology. However, this lead is diminishing.

Electronic commerce (business transactions on the Web) and the information technology (IT) industries that make “e-commerce” possible are growing and changing at breathtaking speed, fundamentally altering the way Americans produce, consume, communicate, and play.

- Growth in the available measures of e-commerce (e. g. , estimates of the value of e-commerce business transactions) is outpacing last year’s most optimistic projections. As a share of the retail portion of the economy, however, e-commerce remains quite small—less than one percent.

- IT-producing industries (i.e., producers of computer and communications hardware, software, and services) that enable e-commerce play a strategic role in the growth process. Between 1995 and 1998, these IT-producers, while accounting for only about 8 percent of U. S. GDP, contributed on average 35 percent of the nation's real economic growth.
- In 1996 and 1997 (the last years for which detailed data are available), falling prices in IT producing industries brought down overall inflation by an average 0.7 percentage points, contributing to the remarkable ability of the U. S. economy to control inflation and keep interest rates low in a period of historically low unemployment.
- IT industries have achieved extraordinary productivity gains. During 1990 to 1997, IT-producing industries experienced robust 10.4 percent average annual growth in Gross Product Originating, or value added, per worker (GPO/W). In the goods-producing subgroup of the IT-producing sector, GPO/W grew at the extraordinary rate of 23.9 percent. As a result, GPO/W for the total private nonfarm economy rose at a 1.4 percent rate, despite slow 0.5 percent growth in non-IT-producing industries.
- By 2006, almost half of the U. S. workforce will be employed by industries that are either major producers or intensive users of information technology products and services. Innovation has increased demand for high paid, "core IT workers" (e.g., computer scientists, engineers), created new IT occupations, changed skill requirements for some non-IT occupations, and raised minimum skill requirements for many other jobs. Wage gaps between workers in IT industries and all other workers continue to widen.
- The pervasiveness of information technology, the variety of its benefits to producers and consumers, and the speed of economic change in the digital era have tested the limits of established indices of economic performance. Federal statistical agencies have taken steps to improve data collection and analysis, but much remains to be done.

Unit 14 Internet Finance

Text A Crowdfunding

Crowdfunding is the practice of funding a project or venture by raising monetary contributions from a large number of people, typically via the internet. One early-stage equity expert described it as “the practice of raising funds from two or more people over the internet towards a common Service, Project, Product, Investment, Cause, and Experience, or SPPICE.”

A possible early precursor of the crowdfunding business model could be the concept of collective fundraising or praenumeration, a subscription business model, which was used in the 17th century to finance publications planned but not yet printed. Another precursor would be the cooperative movement of the 19th and 20th centuries, which saw collective groups, such as community or interest-based groups, pooling subscribed funds to develop new concepts, products, and means of distribution and production, particularly in rural areas of Western Europe and North America.

The earliest recorded use of the word “crowdfunding” was in August 2006. Crowdfunding as a concept pre-dates the Internet. Crowdfunding gained traction after the launch of *ArtistShare* in 2003. Following ArtistShare, more crowdfunding sites started to appear on the web. Crowdfunding websites helped companies and individuals worldwide raise US \$89 million from members of the public in 2010, US \$1.47 billion in 2011 and US \$2.66 billion in 2012—US \$1.6 billion of the 2012 amount was raised in North America. In 2012 more than one million individual campaigns were established globally and the industry was projected to grow to US \$5.1 billion in 2013.

A May 2014 report presented data showing that during the month of March 2014, more than US \$60,000 dollars were raised on an hourly basis via global crowdfunding initiatives. Also during this time period, 442 crowdfunding campaigns were launched globally on a daily basis.

1. General introduction

Participants of crowdfunding

The crowdfunding model is fueled by three types of actors: the project initiator who proposes the idea and/or project to be funded; individuals or groups who support the idea; and a moderating organization (the “platform”) that brings the parties together to launch the idea.

Types

The Crowdfunding Centre's May 2014 report identified the existence of two primary types of crowdfunding:

Rewards Crowdfunding: entrepreneurs pre-sell a product or service to launch a business concept without incurring debt or sacrificing equity/shares.

Equity Crowdfunding: the backer receives shares of a company, usually in its early stages, in exchange for the money pledged. The company's success is determined by how successfully it can demonstrate its viability.

Reward-based crowdfunding has been used for a wide range of purposes, including motion picture promotion, free software development, inventions development, scientific research, and civic projects.

A study in 2014 reported that two types of reward-based crowdfunding were identified: “‘Keep-it-All’ (KIA) where the entrepreneurial firm sets a fundraising goal and keeps the entire amount raised regardless of whether or not they meet their goal, and ‘All-or-Nothing’ (AON) where the entrepreneurial firm sets a fundraising goal and keeps nothing unless the goal is achieved.” The study's researchers analyzed 22, 875 crowdfunding campaigns, with targets of between US \$5,000 and US \$200,000, and concluded: “Overall, [all-or-nothing] fundraising campaigns involved substantially larger capital goals, and were much more likely to be successful at achieving their goals.” In its review of the study outcomes, the Inc. com publication explained that potential investors are more inclined to support “all-or-nothing strategy” initiatives, whereby a substandard product will not be released if the funding goal is not achieved. The Inc. com review concluded that “AON” campaign typically provide more detailed information on the campaign.

Equity Crowdfunding is the collective effort of individuals to support efforts initiated by other people or organizations through the provision of finance in the form of equity. In the United States, legislation that is mentioned in the 2012 JOBS Act will allow for a wider pool of small investors with fewer restrictions following the implementation of the act.

In the U. S. , debt-based crowdfunding from non-banks became more prominent as a form of crowdfunding in 2012, with the launch of the Lending Club, which had advanced more than US \$500 million in loans via its website by April 2012. Prospective borrowers of the Lending Club first submit their requirements, and are then matched with pools of investors who are willing to accept the credit terms. Platforms such as the Lending Club gained popularity, as banks increased interest rates or reduced their level of lending activity. Another credit-based platform, Prosper. com, was established in 2006 and had funded nearly US \$325 million in personal loans by April 2012.

Litigation crowdfunding allows individuals to invest in legal disputes, globally, allowing those in need of litigation funding anywhere in the world to obtain it from their

peers. Individuals are given a stake in the claim they have funded, which allows individual funders to multiply their investment in justice many times over if a case succeeds.

Charity crowdfunding is the collective effort of individuals to help charitable causes.

2. Role of the crowd

The inputs of the individuals in the crowd trigger the crowdfunding process and influence the ultimate value of the offerings or outcomes of the process. Each individual acts as an agent of the offering, selecting and promoting the projects in which they believe. They will sometimes play a donor role oriented towards providing help on social projects. In some cases they will become shareholders and contribute to the development and growth of the offering. Individuals disseminate information about projects they support in their online communities, generating further support (promoters).

Motivation for consumer participation stems from the feeling of being at least partly responsible for the success of others' initiatives (desire for patronage), striving to be a part of a communal social initiative (desire for social participation), and seeking a payoff from monetary contributions (desire for investment).

An individual who takes part in crowdfunding initiatives tends to reveal several distinct traits: innovative orientation, which stimulates the desire to try new modes of interacting with firms and other consumers; social identification with the content, cause or project selected for funding, which sparks the desire to be a part of the initiative; (monetary) exploitation, which motivates the individual to participate by expecting a payoff.

3. Crowdfunding platforms

As of 2012, there were over 450 crowdfunding platforms. Project creators need to exercise their own due diligence in order to understand which platform is the best to use depending on the type of project that they want to launch. There are fundamental differences in the services provided by many crowdfunding platforms.

For instance, CrowdCube and Seedrs are Internet platforms which enable small companies to issue shares over the internet and receive small investments from registered users in return. While CrowdCube is meant for users to invest small amounts and acquire shares directly in start-up companies, Seedrs on the other hand pools the funds to invest in new businesses, as a nominated agent.

Curated crowdfunding platforms serve as a "network orchestrators" by curating the offering that are allowed on the platform. They create the necessary organizational systems and conditions for resource integration among other players to take place.

Relational mediators act as an intermediary between supply and demand. They replace traditional intermediaries (such as traditional record companies, venture capitalists). These platforms link new artists, designers, project initiators with committed supporters

who believe in the persons behind the projects strongly enough to provide monetary support.

Growth engines focus on the strong inclusion of investors. They disintermediate by eliminating the activity of a service provider previously involved in the network. The crowdfunding platforms seek stakes from matching high-net-worth private investors directly with project initiators.

4. Crowdfunding applications

Crowdfunding is being experimented with as a funding mechanism for creative work such as blogging and journalism, music, independent film, and for funding startup companies. Community music labels are usually for-profit organizations where “fans assume the traditional financier role of a record label for artists they believe in by funding the recording process.”

Since pioneering crowdfunding in the film industry, Spanner Films has published a “how to” guide. A *Financialist* article published in mid-September 2013 stated that “the niche for crowdfunding exists in financing films with budgets in the US \$1 to \$10 million range” and crowdfunding campaigns are “much more likely to be successful if they tap into a significant pre-existing fan base and fulfill an existing gap in the market.” Innovative new platforms, such as RocketHub, have emerged that combine traditional funding for creative work with branded crowdsourcing—helping artists and entrepreneurs unite with brands “without the need for a middle man”.

5. Philanthropy and civic projects

A variety of crowdfunding platforms have emerged to allow ordinary web users to support specific philanthropic projects without the need for large amounts of money.

GlobalGiving allows individuals to browse through a selection of small projects proposed by nonprofit organizations worldwide, donating funds to projects of their choice. Microcredit crowdfunding platforms such as Kiva (organization) and Wokai facilitate crowdfunding of loans managed by microcredit organizations in developing countries.

The US-based nonprofit Zidisha offers a new twist on these themes, applying a direct person-to-person lending model to microcredit lending for low-income small business owners in developing countries. Zidisha borrowers who pass a background check may post microloan applications directly on the Zidisha website, specifying proposed credit terms and interest rates. Individual web users in the US and Europe can lend as little as one US dollar, and Zidisha’s crowdfunding platform allows lenders and borrowers to engage in direct dialogue. Repaid principal and interest is returned to the lenders, who may withdraw the cash or use it to fund new loans.

DonorsChoose.org, founded in 2000, allows public school teachers in the United States to request materials for their classrooms. Individuals can lend money to teacher-

proposed projects, and the organization fulfills and delivers supplies to schools. There are also a number of own-branded university crowdfunding websites, which enable students and staff to create projects and receive funding from alumni of the university or the general public.

Several dedicated civic crowdfunding platforms have emerged in the US and the UK, some of which have led to the first direct involvement of governments in crowdfunding.

6. Real estate crowdfunding

Real estate crowdfunding is the online pooling of capital from investors to fund mortgages secured by real estate, such as “fix and flip” redevelopment of distressed or abandoned properties, and equity for commercial and residential projects, acquisition of pools of distressed mortgages, home buyer down payments and similar real estate related outlets. Investment, via specialized online platforms, is generally completed under Title II of the JOBS Act and is limited to accredited investors. The platforms offer low minimum investments, often \$100—\$10,000.

7. Intellectual property exposure

One of the challenges of posting new ideas on crowdfunding sites is there may be little or no intellectual property (IP) protection provided by the sites themselves. Once an idea is posted, it can be copied. As Slava Rubin, founder of IndieGoGo said: “We get asked that all the time, ‘How do you protect me from someone stealing my idea?’ We’re not liable for any of that stuff.” Inventor advocates, such as Simon Brown, founder of the UK-based United Innovation Association, counsel that ideas can be protected on crowdfunding sites through early filing of patent applications, use of copyright and trademark protection as well as a new form of idea protection supported by the World Intellectual Property Organization called Creative Barcode.

8. Benefits for the creator

Crowdfunding campaigns provide producers with a number of benefits, beyond the strict financial gains. The following are non financial benefits of crowdfunding.

Profile—a compelling project can raise a producer’s profile and provide a boost to their reputation.

Marketing—project initiators can show there is an audience and market for their project. In the case of an unsuccessful campaign, it provides good market feedback.

Audience engagement—crowd funding creates a forum where project initiators can engage with their audiences. Audience can engage in the production process by following progress through updates from the creators and sharing feedback via comment features on the project’s crowdfunding page.

Feedback—offering pre-release access to content or the opportunity to beta-test

content to project backers as a part of the funding incentives provides the project initiators with instant access to good market testing feedback.

Proponents of the crowdfunding approach argue that it allows good ideas which do not fit the pattern required by conventional financiers to break through and attract cash through the wisdom of the crowd. If it does achieve “traction” in this way, not only can the enterprise secure seed funding to begin its project, but it may also secure evidence of backing from potential customers and benefit from word of mouth promotion in order to reach the fundraising goal. Another potential positive effect is the propensity of groups to “produce an accurate aggregate prediction” about market outcomes as identified by author James Surowiecki in his book *The wisdom of crowds*, thereby placing financial backing behind ventures likely to succeed.

Proponents also identify a potential outcome of crowdfunding as an exponential increase in available venture capital. One report claims that If every American family gave one percent of their investable assets to crowdfunding, \$300 billion (a 10X increase) would come into venture capital. Proponents also cite that a benefit for companies receiving crowdfunding support is that they retain control of their operations, as voting rights are not conveyed along with ownership when crowdfunding.

As part of his response to the Amanda Palmer Kickstarter controversy, Albini expressed his supportive views of crowdfunding for musicians, explaining: “I’ve said many times that I think they’re part of the new way bands and their audience interact and they can be a fantastic resource, enabling bands to do things essentially in cooperation with their audience.” Albini described the concept of crowdfunding as “pretty amazing”.

9. Risks and barriers for the creator

Crowdfunding also comes with a number of potential risks or barriers.

Reputation—failure to meet campaign goals or to generate interest results in a public failure. Reaching financial goals and successfully gathering substantial public support but being unable to deliver on a project for some reason can severely negatively impact one’s reputation.

IP protection—many Interactive Digital Media developers and content producers are reluctant to publicly announce the details of a project before production due to concerns about idea theft and protecting their IP from plagiarism.

Donor exhaustion—there is a risk that if the same network of supporters is reached out to multiple times, that network will eventually cease to supply necessary support.

Public fear of abuse—concern among supporters that without a regulatory framework, the likelihood of a scam or an abuse of funds is high. The concern may become a barrier to public engagement.

For crowdfunding of equity stock purchases, there is some research in social psychology that indicates that, like in all investments, people don’t always do their due

diligence to determine if it's a sound investment before investing, which leads to making investment decisions based on emotion rather than financial logic.

Crowdfunding draws a crowd: investors and other interested observers who follow the progress, or lack of progress, of a project. Sometimes it proves easier to raise the money for a project than to make the project a success. Managing communications with a large number of possibly disappointed investors and supporters can be a substantial, and potentially diverting, task.

New words

- precursor [pri:'kʌsə] *n.* 前辈, 前身
traction [ˈtrækʃən] *n.* 牵引力
launch [lɔ:ntʃ] *v.* 发起
campaign [kæm'peɪn] *n.* 活动, 运动
equity [ˈekwəti] *n.* 权益, 股权
litigation [ˌlɪti'geɪʃən] *n.* 诉讼, 起诉
charity [ˈtʃærəti] *v.* 慈善
stake [steɪk] *n.* 赌注, 利害关系, 利益
nominate [ˈnɒmineɪt] *v.* 提名; 任命; 指定
curate [ˈkjʊreɪt] *v.* 组织, 管理
orchestrator [ˈɔ:kɪstreɪtə] *n.* 管弦乐演奏家; 管弦乐编曲家
resource integration 资源整合
assume [ə'sju:m] *v.* 充当
crowdsourcing [kraʊd'sɔ:siŋ] *n.* 众包
philanthropy [fɪ'lənθrəpi] *n.* 慈善
benefit [ˈbenɪfɪt] *n.* 好处
abuse [ə'bjʊ:z] *v.* 滥用
due diligence 尽职调查, 严格评估, 尽职审查
scam [skæm] *n.* 阴谋; 骗局; 诡计
substantial [səb'stænʃəl] *adj.* 大量的
potentially [pəu'tenʃəli] *adv.* 潜在地
diverting [daɪ'vɜ:tiŋ] *adj.* 使人快乐的

Notes about Terms

1. Praenumeration: 订阅模式的早期形式。这是德国在 18 世纪图书贸易中常见的商业惯例。出版商出售一本规划出版的书籍, 但尚未印刷, 通常有一个折扣, 以提前弥补其成本。这种商业惯例在杂志出版方面特别常见, 有助于预先确定多少用户会购买。

2. SPICE: 服务 (Service)、产品 (Product)、项目 (工程)、投资 (Investment)、事业 (Cause) 和体验 (Experience)。

3. Kickstarter:一家总部在美国的全球众筹平台。公司的使命是帮助创意项目的诞生。据报道,公司从 780 万支持者的手中获得 15 亿美元的承诺金,为 20 万个创新项目融资,如电影、音乐、舞台剧、漫画、新闻、视频游戏、与食品相关的项目。

Exercises

I. Fill in the blanks according to the text.

One of the challenges of _____ new ideas on crowdfunding sites is there may be little or _____ intellectual property (IP) protection _____ by the sites _____. Once an idea is posted, it can be copied. As Slava Rubin, founder of IndieGoGo said: “We get asked that all _____ time, ‘How do you protect me _____ someone stealing my idea?’ We’re not liable _____ any of that stuff.” Inventor advocates, such as Simon Brown, founder of the UK-based United Innovation Association, counsel that ideas can be protected on crowdfunding sites _____ early filing of patent applications, use of copyright and trademark _____ as well as a new form of idea protection _____ by the World Intellectual Property Organization called Creative Barcode.

II. Translate the following sentences into Chinese.

1. Crowdfunding is the practice of funding a project or venture by raising monetary contributions from a large number of people, typically via the internet.
2. Crowdfunding campaigns provide producers with a number of benefits, beyond the strict financial gains.
3. One of the challenges of posting new ideas on crowdfunding sites is there may be little or no intellectual property (IP) protection provided by the sites themselves.
4. A variety of crowdfunding platforms have emerged to allow ordinary web users to support specific philanthropic projects without the need for large amounts of money.

III. Translate the following sentences into English.

1. 众筹业务模式的一个可能的早期形式恐怕就是集体集资这一概念。
2. 不动产众筹就是投资者为不动产的抵押权进行融资的在线资本汇集。
3. 有时候为项目集资证明比使项目成功还容易。
4. 慈善众筹就是个人集体出力帮助慈善事业。

IV. Answer the following questions.

What are benefits and risks of crowdfunding?

Text B Crowdfunding: the Disruptor's Disruptor

If Polonius were around these days, he wouldn't be getting much sleep. Particularly if you think of crowdfunding as borrowing from folks you've “friended”. Hundreds of thousands of loans have been made through crowdfunding. That's hundreds of thousands of friends. Or ex-friends, as the case may be. In the U. S. , with the rollout of the JOBS Act, wherein the need to register certain securities including fundraisings of less than \$1

million is no longer necessary, and with similar legislation being considered in Canada, we'll only see more of this kind of borrowing.

While the Internet takes the lion's share of the credit for enabling crowdfunding, there's a countervailing trend driving its growth. Bank lending for the types of entrepreneurial activities that crowdfunding is helping to finance has virtually dried up. Post-crash, the pendulum swing has found banks erring on the side of hypercaution, and crowdfunding is fast becoming the new disruptor in the world of finance. If startups are disruptors of established businesses, that makes crowdfunding the disruptor's disruptor. Direct finance relationships are taking the place of traditional sources of borrowing—ultimately a side effect of the trend could be the death of a once profitable category of bank lending.

The definition of crowdfunding includes, these days, the use of web-based outreach and interaction, such as Facebook or other social media to raise funds. While all crowdfunding models involve the reaching of a capital goal through small contributions from many people, there are two basic approaches. Doing it yourself, or having it done for you by the crowdfunding equivalent of an investment bank. More on that, later.

The concept of funding a project by convincing a large number of people to contribute a small amount isn't new. However, the Internet has taken the prospect up to new heights as well as down to the grassroots level. Now it's possible for virtually anyone with a business idea, project, or cause to be crowdfunded, or to engage in crowdsourcing (an umbrella term for any “online, distributed problem-solving and production model”—that is, anyone willing to think broadly about the use of social media or other online means to reach a large, and largely unscreened audience.

The idea is that there are a lot of bright, creative people—and investors who would support interesting new ideas—out there looking to be a part of something. And if you can figure out how to reach these people, it could be the answer to how you can get your business off the ground.

Many hands make light work. And for a tech-savvy entrepreneur looking to start up a business, get some help on a project that's too big for a few people to handle, or merely bat around some ideas, crowdfunding can be just the ticket to lift some of the burden. Crowdfunding has been getting more media attention lately, bringing it out of the realm of word-of-mouth projects you hear about—like your former babysitter using it to start her own modern dance company. Now we're talking about real companies sourcing millions, one contribution at a time. This approach helps support out-of-the-box ideas and thinking, particularly those that might not meet the underwriting standards of conventional financiers. Instead, they are making their appeal to the “wisdom of the crowd”.

How Crowdfunding Works: It Starts with Crowdsourcing

Have you ever thought where would we be without Wikipedia? If there was ever a

widespread example of the collective thinking power of the many, Wikipedia is that example. And yet this crowdsourced online resource, phenomenal as it may seem to anyone old enough to remember when it didn't exist, is a familiar concept made modern by the channels through which it is conducted. The concept goes much further back. The Oxford English Dictionary, begun in the late 19th century, was a 70-year crowdsourcing project that is still receiving submissions (the term 'crowdsourcing' was added to the OED recently, along with the verb 'tweet'). Six million entries have been sent in by post. That's a pretty hefty crowd sample.

Making the leap to crowdfunding, you might think that it's easy to get people to contribute their knowledge or creative ideas. But why would they contribute money? One of the short answers is that if the entrepreneur brings the right knowledge and creative ideas to the table and presents them in the right way, there are likely people who will want to jump on the bandwagon and get that project off the ground. At the very least, it would be the equivalent of "angel" level investment that's looking more to support a deserving startup or project than to make a killing, which is more in the realm of venture capital money.

Moreover, there's a school of thinking that says that if the idea can attract a large crowd of financial supporters, it is likely to have merit. Think about that for a second. In a sort of mind-bending way that's the time-and-space inversion of Peter Lynch's investment wisdom, or of the idea that you only value what you pay for. He often discovered some of his best-performing investments at the mall, by looking at what people were purchasing and taking home. If you like the store, chances are you'll love the stock. In this case, if people like the idea enough to invest in it, chances are they'd go out and buy the product or service.

Open Calls, Selective Calls

The entertainment world uses the term 'open call' to describe the process of bringing in a large pool of talent to audition for a production. Anyone who has ever hoped to act or sing has probably wound up at one of these casting calls, also called cattle calls. Not so long ago, these open calls would be advertised in the newspaper, or on bulletin boards in industry hangouts. Now they arrive in your email inbox as well as online. A more selective method of finding the right talent involves middle men, in this case agents. A producer or casting director might let several agents know what they're looking for—or if it's a part that they envision a certain actor playing, they might only contact one agent. That way the pool is smaller and pre-selected.

There's a similar spectrum of scouting in business financing, though until now it's been heavily weighted toward the selective end. If a startup needed funding, traditionally the entrepreneur would either parlay some of his own savings from the high-paying, expertise-enriching job he left; or he might ask some wealthy friends or others in his

industry to invest; or he might connect with a PR firm to cast the net a little wider. Traditionally the entrepreneur would spend a huge amount of time on the road, visiting would-be funders. Crowdfunding has taken the bite out of that and added another level of possibility by opening up the appeal to anyone with a smartphone or laptop.

Several new players are entering the scene and are facilitating crowdfunding. They are the aforementioned crowdfunding equivalent of the investment bank. Startups themselves, their role is to seek out angel funding, thus eliminating the need for more traditional funding. . They have the potential to pose serious risks to traditional lenders.

Recently, a company called SeedInvest, an online platform designed to make it easier for investors to identify their ideal startups, was launched. In short, they are making it possible to do online what has been done in person for a century or more. Due diligence, compliance and the funding process itself are all seamlessly completed online, so that investing in a startup is as simple as buying a stock through your online broker.

CircleUp is another such platform. Launched in April 2012, it has become one of the largest crowdfunding sites, screening startup businesses, providing financials and other essential company information, and enabling investors to ask questions of the innovative CEOs heading up companies offered on the site.

Premium men's apparel designer Gustin recently had a crowdfunded barn raising that netted \$450,000 from more than 4,000 backers. Its creative approach to solving a longtime problem in the fashion industry—namely, producing clothing on speculation and then not being able to sell it or make a margin on it—has turned the entire equation of clothing manufacturing around. First, Gustin crowdsourced customer opinion on the styles, cut and fabric of the high-end jeans it makes. Then it made the radical move of going completely online and direct to the consumer, cutting out its ready-to-wear and brick-and-mortar operations. Much of the funding came from payment for pre-orders, which allowed the company to not only cut down on materials inventory, but gain much better intelligence on which fabrics and how much of them to order to begin with. Gustin found that its crowdsourced customers were willing to give up expediency—they now must wait four to six weeks to get the jeans they've ordered—in exchange for having a say in the design and manufacturing (sourcing) processes. Many voices make for good business—in this case, at least.

Another innovator who's been receiving good press recently is 22-year-old Lucas Duplan, the tech wonder boy who finished an undergraduate degree in computer science at Stanford in three years. Duplan started Clinkle, a payments platform that aims to replace credit cards with smartphones, with \$25 million in early financing acquired by... crowdfunding. His early investors include Accel Partners, Andreessen Horowitz, Intel, Intuit, Marc Benioff of Salesforce.com, and Peter Thiel of PayPal. Granted, he had some heavyweights pulling for him—including one of the first investors in Facebook—and spreading the word, but between his geographic location in Silicon Valley, his innovative

high-tech idea, and the mystery with which he's surrounding his methods, Duplan and Clinkle have the perfect ingredients for a wildly successful startup.

Who Should Use Crowdfunding?

This brings us to the question of who should go this route and why? Should crowdfunding be a last resort for a startup, or a grand, democratic opening gesture? The most successful crowdfunding examples have a certain spirit behind them: first, a personality that's not afraid to take the heat, nor afraid of interacting with people and confidently telling his or her story. If you're a technophobe, or resistant to new ways, crowdfunding probably isn't for you. It requires a lot of energy of a very specific kind, and involves a lot of up-to-the-minute, out-of-the-box thinking. It might involve improvising, or at the minimum thinking creatively about how things can be done, and for how much (or little) money. It's geared toward the attention span of the generation that demanded fast-frame action films. Don't blink or you'll miss it.

In a sense, crowdfunding is a modern-day version of the wild west. It's a land grab, a democratic, open virtual process that can result in a payout. But even with the best of intentions on the part of the funded, and due diligence on the part of the funder, it can result in a loss. Odds are strong that an investor in a crowdfunded project is unlikely to get a quick return on the money put in. To be attractive to the investor, the entrepreneur has to appear with the big guns of idea, business drive, personality, reasonable incentives, good connections, and great PR execution. In turn, the would-be funder has to come in ready to do some homework and wield a healthy dose of skepticism.

For the entrepreneur, crowdfunding sites like Fundable.com and Kickstarter coach their startup clients to think through the process, but only to a certain degree: have a story on which to hinge your campaign; provide reciprocal value; create scarcity by limiting the number of rewards you offer; build credibility; stay in touch with your supporters. From there it's up to you, your contacts, and your sheer ingenuity.

What's New Soon Becomes Mainstream

It's not surprising that crowdfunding—a business approach that only a short while ago seemed radical—found its beginnings among artists, creatives, and innovators. Though a few large institutions have hosted crowdsourcing events—such as IBM's 2006 Innovation Jam, Swift's Innotribe regional forums and Procter & Gamble's Incubator Day featuring CircleUp clients—on the whole this Internet-based form is geared to, and appeals most to, individuals. In the examples of successful crowdsourcing cited above, entrepreneurial success can come down to the vision of a single individual, and depend upon other individuals' desire to connect and be part of something new.

In the relatively short time it took to write this article, new crowdfunding platforms have been launched, and with ever more innovative levels of sophistication for screening

those looking to be financed and making the process smoother. While it's all evolving quickly, the ultimate end is to make crowdfunding more the rule than the exception. And at its best it's intended to be a winning proposition for all parties.

Notes

Polonius;波洛尼厄斯(莎士比亚悲剧《哈姆雷特》中的人物),著名的一句话是“Neither a borrower nor a lender be”(不要借钱也不要借给人钱)。Friended 是作者的名词活用,但事实上 friend 也可以作为动词用,只是比较少见而已,一般用在诗歌中。creatives 指创意人员。

Reading Materials

Mobile Payment

Mobile payment, also referred to as mobile money, mobile money transfer, and mobile wallet generally refer to payment services operated under financial regulation and performed from or via a mobile device. Instead of paying with cash, cheque, or credit cards, a consumer can use a mobile phone to pay for a wide range of services and digital or hard goods.

Mobile payment is being adopted all over the world in different ways. Combined market for all types of mobile payments is expected to reach more than \$600B globally by 2013, which would be double the figure as of February, 2011, while mobile payment market for goods and services, excluding contactless Near Field Communication or NFC transactions and money transfers, is expected to exceed \$300B globally by 2013.

Classification of mobile payment models by the role of participants

Operator-Centric Model: The mobile operator acts independently to deploy mobile payment service. The operator could provide an independent mobile wallet from the user mobile account(airtime). A large deployment of the Operator-Centric Model is severely challenged by the lack of connection to existing payment networks. Mobile network operator should handle the interfacing with the banking network to provide advanced mobile payment service in banked and under banked environment. Pilots using this model have been launched in emerging countries but they did not cover most of the mobile payment service use cases. Payments were limited to remittance and airtime top up.

Bank-Centric Model: A bank deploys mobile payment applications or devices to customers and ensures merchants have the required point-of-sale (POS) acceptance capability. Mobile network operator are used as a simple carrier, they bring their experience to provide Quality of service (QOS) assurance.

Collaboration Model: This model involves collaboration among banks, mobile operators and a trusted third party.

Peer-to-Peer Model: The mobile payment service provider acts independently from financial institutions and mobile network operators to provide mobile payment. For example the MHITS SMS payment service uses a peer-to-peer model.

Presently there are four primary models for mobile payments:

1. Premium SMS based transactional payments

2. Direct Mobile Billing
3. Mobile web payments (WAP)
4. Contactless NFC (Near Field Communication)

SMS/USSD-based transactional payments

The consumer sends a payment request via an SMS text message or an USSD to a short code and a premium charge is applied to their phone bill or their online wallet. The merchant involved is informed of the payment success and can then release the paid for goods.

Since a trusted delivery address has typically not been given these goods are most frequently digital with the merchant replying using a Multimedia Messaging Service to deliver the purchased music, ringtones, wallpapers etc.

A Multimedia Messaging Service can also deliver barcodes which can then be scanned for confirmation of payment by a merchant. This is used as an electronic ticket for access to cinemas and events or to collect hard goods.

Transactional payments have been popular in Asia and Europe but are now being overtaken by other mobile payment methods, such as mobile web payments (WAP), mobile payment client (Java ME, Android...) and Direct Mobile Billing.

Possible reasons include:

1. Poor reliability — transactional payments can easily fail as messages get lost.
2. Slow speed — sending messages can be slow and it can take hours for a merchant to get receipt of payment. Consumers do not want to be kept waiting more than a few seconds.
3. Security — The SMS/USSD encryption ends in the radio interface, then the message is a plaintext.
4. High cost — There are many high costs associated with this method of payment. The cost of setting up short codes and paying for the delivery of media via a Multimedia Messaging Service and the resulting customer support costs to account for the number of messages that get lost or are delayed.
5. Low payout rates — operators also see high costs in running and supporting transactional payments which results in payout rates to the merchant being as low as 30%. Usually around 50%.
6. Low follow-on sales — once the payment message has been sent and the goods received there is little else the consumer can do. It is difficult for them to remember where something was purchased or how to buy it again. This also makes it difficult to tell a friend.

Some mobile payment services accept “premium SMS payments”. Here is the typical end user payment process:

1. User sends SMS with keyword and unique number to a premium short code.
2. User receives a PIN (User billed via the short code on receipt of the PIN).
3. User uses PIN to access content or services.

Direct mobile billing

The consumer uses the mobile billing option during checkout at an e-commerce site—such as an online gaming site—to make a payment. After two-factor authentication involving a PIN and One-Time-Password (often abbreviated as OTP), the consumer's mobile account is charged for the purchase. It is a true alternative payment method that does not require the use of credit/debit cards or pre-registration at an online payment solution such as PayPal, thus bypassing banks and credit card companies altogether. This type of mobile payment method, which is extremely prevalent and popular in Asia, provides the following benefits:

1. Security — Two-factor authentication and a risk management engine prevents fraud.
2. Convenience — No pre-registration and no new mobile software is required.
3. Easy — It's just another option during the checkout process.
4. Fast — Most transactions are completed in less than 10 seconds.
5. Proven — 70% of all digital content purchased online in some parts of Asia uses the Direct Mobile Billing method.

Mobile web payments (WAP)

The consumer uses web pages displayed or additional applications downloaded and installed on the mobile phone to make a payment. It uses WAP (Wireless Application Protocol) as underlying technology and thus inherits all the advantages and disadvantages of WAP.

Benefits include:

1. Follow-on sales where the mobile web payment can lead back to a store or to other goods the consumer may like. These pages have a URL and can be bookmarked making it easy to re-visit or share.
2. High customer satisfaction from quick and predictable payments.
3. Ease of use from a familiar set of online payment pages.

However, unless the mobile account is directly charged through a mobile network operator, the use of a credit/debit card or pre-registration at online payment solution such as PayPal is still required just as in a desktop environment.

Mobile web payment methods are now being mandated by a number of mobile network operators.

Direct operator billing

Direct operator billing, also known as mobile content billing, WAP billing, and carrier billing, requires integration with the operator. It provides certain benefits:

1. The operators already have a billing relationship with the consumers, the payment will be added to their bill.
2. Provides instantaneous payment.
3. Protect payment details and consumer identity.
4. Better conversion rates.
5. Reduced customer support costs for merchants.

One drawback: the payout rate will be much lower than with other payment providers. Examples from a popular provider: 92% with Paypal, 85 to 86% with Credit Card, 45 to 91.7% with operator billing in the US, UK and some smaller European countries, but usually around 60%.

More recently, Direct operator billing is being deployed in an in-app environment, where mobile application developers are taking advantage of the one-click payment option that Direct operator billing provides for monetizing mobile applications. This is a logical alternative to credit card and Premium SMS billing.

In 2012, Ericsson and Western Union partnered to expand the direct operator billing market, making it possible for mobile operators to include Western Union Mobile Money Transfers as part of their mobile financial service offerings. Given the international reach of both companies, the partnership is meant to accelerate the interconnection between the m-commerce market and the existing financial world.

Credit card

A simple mobile web payment system can also include a credit card payment flow allowing a consumer to enter their card details to make purchases. This process is familiar but any entry of details on a mobile phone is known to reduce the success rate (conversion) of payments.

In addition, if the payment vendor can automatically and securely identify customers then card details can be recalled for future purchases turning credit card payments into simple single click-to-buy giving higher conversion rates for additional purchases.

Online wallets

online companies like PayPal, Amazon Payments, and Google Wallet also have mobile options.

Generally, this is the process:

First payment:

User registers, inputs their phone number, and the provider sends them an SMS with a PIN.

User enters the received PIN, authenticating the number.

User inputs their credit card info or another payment method if necessary (not necessary if the account has already been added) and validates payment.

Subsequent payments:

The user re-enters their PIN to authenticate and validates payment.

Requesting a PIN is known to lower the success rate (conversion) for payments. These systems can be integrated with directly or can be combined with operator and credit card payments through a unified mobile web payment platform.

QR Code Payments

QR Codes 2D barcode are square bar codes. QR codes are an easy way to inject info into mobile phone. This makes it easy to create communication such as visit a website or copy useful text. QR codes have been around since they were invented in 1994. Originally used to track products in warehouses, QR codes were designed to replace traditional (1D bar codes). Traditional bar codes just represent numbers, which can be looked up in a database and translated into something meaningful. QR, or “Quick Response” bar codes were designed to contain the meaningful info right in the bar code. They’ve been a successful marketing tool in Asia and Europe.

Contactless Near Field Communication

Near Field Communication (NFC) is used mostly in paying for purchases made in physical stores or transportation services. A consumer using a special mobile phone equipped with a smartcard waves his/her phone near a reader module. Most transactions do not require authentication, but some require authentication using PIN, before transaction is completed. The payment could be deducted from a pre-paid account or charged to a mobile or bank account directly.

Mobile payment method via NFC faces significant challenges for wide and fast adoption, due to lack of supporting infrastructure, complex ecosystem of stakeholders, and standards. Some phone manufacturers and banks, however, are enthusiastic. Ericsson and Aconite are examples of businesses that make it possible for banks to create consumer mobile payment applications that take advantage of NFC technology.

NFC vendors in Japan are closely related to mass-transit networks, like the Mobile Suica used on the JR East rail network. Osaifu-Keitai system, used for Mobile Suica and many others including Edy and nanaco, has become the de facto standard method for mobile payments in Japan. Its core technology, Mobile FeliCa IC, is partially owned by Sony, NTT DoCoMo and JR East. Mobile FeliCautilize Sony’s FeliCa technology, which itself is the de facto standard for contactless smart cards in the country.

Other NFC vendors mostly in Europe use contactless payment over mobile phones to pay for on- and off-street parking in specially demarcated areas. Parking wardens may

enforce the parkings by license plate, transponder tags or barcode stickers. First conceptualized in the 1990s, the technology has seen commercial use in this century in both Scandinavia and Estonia. End users benefit from the convenience of being able to pay for parking from the comfort of their car with their mobile phone, and parking operators are not obliged to invest in either existing or new street-based parking infrastructures. Parking wardens maintain order in these systems by license plate, transponder tags or barcode stickers or they read a digital display in the same way as they read a pay and display receipt.

Other vendors use a combination of both NFC and a barcode on the mobile device for mobile payment, for example, Cimbali or DigiMo, making this technique attractive at the point of sale because many mobile devices in the market do not yet support NFC.

Cloud-based mobile payments

Google, PayPal, GlobalPay and GoPago use a cloud-based approach to in-store mobile payment. The cloud based approach places the mobile payment provider in the middle of the transaction, which involves two separate steps. First, a cloud-linked payment method is selected and payment is authorized via NFC or an alternative method. During this step, the payment provider automatically covers the cost of the purchase with issuer linked funds. Second, in a separate transaction, the payment provider charges the purchaser's selected, cloud-linked account in a card-not-present environment to recoup its losses on the first transaction.

Audio signal-based payments

The audio channel of the mobile phone is another wireless interface that is used to make payments. Several companies have created technology to use the acoustic features of cell phones to support mobile payments and other applications that are not chip-based. The technologies Near sound data transfer (NSDT), Data Over Voice and NFC 2.0 produce audio signatures that the microphone of the cell phone can pick up to enable electronic transactions.

Direct carrier/bank co-operation

In the T-Cash model the mobile phone and the phone carrier is the front end interface to the consumers. The consumer can purchase goods, transfer money to a peer, cash-out, and cash-in. A 'mini wallet' account can be opened as simply as entering *700# on the mobile phone, presumably by depositing money at a participating local merchant and the mobile phone number. Presumably other transactions are similarly accomplished by entering special codes and the phone number of the other party on the consumer's mobile phone.

Unit 15 Electronic Commerce Trust

Text A Role of Trust in e-business Success

The rapid growth in the Internet use augurs well for e-business. The Internet is a necessary avenue but not a sufficient one for e-business. Two factors that significantly contribute to the success of e-business are the trust people place in the online businesses and how secure they feel in transacting business on the Internet. Trust is something that has to be earned over a period of time. In the real world, trust is gained both by observing the physical structure of the organization as well as by third party recommendations. Trust brings in repeat business, an essential ingredient for success. Security is something that the businesses can strive to provide. There are several tools available to enhance security on the Internet. Secure socket layer (SSL) and secure electronic transaction (SET) are two such tools. The topic of online trust has been studied in the literature from a variety of angles such as transaction, institution, technology, product, and information content.

1. Factors contributing to trust

Trust is not easy to measure. It is developed over time. People trust a business based on their own past experience as well as by third party recommendations. In the world of online commerce the factors that significantly contribute for enhancing transaction trust are:

- easy access to description of products and services;
- ease of placing orders;
- order confirmation;
- order tracking;
- and post-sales service.

These qualities support our working definition for trust. Thus, customers want to feel good about each and every one of these aspects before they form the opinion that the business is trustworthy.

A tree-structured design of the organization's products and services will enable easy navigation for the customer. There are numerous tools available for Web design to make the site attractive and easy to navigate. Taking advantage of database tools, an organization can easily bring to the Web real time data such as quantity on hand. Organizations such as Amazon.com have contributed significantly to the growth of software that makes placing orders a breeze. Today there are several third party vendors who provide the Web cart facility. The Web cart virtually parallels the practice in the

BAM world of product ordering. Order confirmation is another integral part of replicating the BAM world practice in e-business. This also enables the customer to see what exactly has been ordered. Technology today can easily facilitate the order confirmation. The most common way this is handled today via E-mail. Since shipping takes place via an independent carrier, order-tracking information usually comes later. This is not a drawback as long as the order tracking information is linked to the order history. The best thing about the order tracking aspect is that the shipper handles this aspect fully. In order to achieve success in building trust the organization should partner with the shipper in sharing information. Post-sales service is a key component in earning customer loyalty and trust. In e-business, the customer is most likely separated by distance from the merchant and at the same time has access to the merchant's Web site around the clock. This is time asymmetry forces an e-business to rely on its information systems to facilitate post-sales service such as return of merchandise. Any bottleneck in this aspect will be a major factor in losing trust.

2. Role of intermediaries in building trust

We discussed earlier the need for a smooth process for post-sales service. One way to achieve this is through an intermediary. It has a two-fold advantage. As we noted earlier, many online businesses are unknown to customers. Yet, they have an interest in doing business with the online company because the product or service has a beneficial aspect to the customer. Their primary concern is the lack of knowledge about the business. On the other hand, they have trust in large financial institutions. So they use the financial institution's intermediary role in guaranteeing payment to the merchant and at the same time assuring customers that their satisfaction is paramount. Financial institutions like First Virtual collect the cost of the order from the customer and hold it in escrow for a set period. The merchant is satisfied that the customer has paid for the order. Customers are satisfied that if the ordered item did not meet their expectations then they have a reliable intermediary to mediate. This is a time-tested concept in the BAM world in the form of escrow accounts. First Virtual has adopted this idea to the online business world. Next, we look at trusted third parties in a different role. These trusted third parties are called "agents". The primary role of agents is to act as intermediaries between several merchants and a whole lot of customers spread all over the world. They are independent and provide their service for a fee.

Their intermediary role involves conflict resolution and customer satisfaction. They have to build the necessary information infrastructure in order to perform this intermediary role. They get their exposure to the customers by means of other trusted organizations such as the Better Business Bureau whose seal they are authorized to use.

3. Digital seal and trust

Around the world, organizations like the Better Business Bureau and the Underwriter's Laboratories have earned the people's trust as independent organizations that look out for the consumer. What they do in the BAM world applies equally in the e-business world. They use their rigorous authentication means to evaluate a product or service. Once the product or service meets their strict standards, then the organization approves the use of their seal in the business' Web site. The use of such a digital seal in a company's Web site provides a fair amount of trust for the ordinary consumer. This is yet another way for a business to start earning trust. There is one danger to the use of digital seals. Businesses bent on defrauding consumers can easily copy the digital seal of a trusted organization and place it in their Web site. By the time such an abuse is noted it might be rather too late. The only way to overcome this drawback is to educate the consumers to follow what is done in the BAM world. When a customer is in doubt about the veracity of a business' claim the consumer calls a trusted third party and verifies the reputation of a business in question. The same thing can be very easily done via an online search of the digital seal provider.

4. Trust and security

So far we looked at various aspects of building trust. An equally important contributor for e-business in general and trust in particular is the security aspect. In the early days of e-business many people shied away from online purchases simply because of security concerns. Thanks to major efforts by Netscape, the concept of SSL was introduced. Immediately, companies like Amazon.com took advantage of the security provided by SSL and grew rapidly. Today many banks and businesses use SSL and other cryptographic techniques to provide secure online services. Another tool available today for enhancing trust is the digital certificate. Yet another tool for guaranteeing transaction security is the SET protocol. It is a network transaction protocol for network-based payment card transactions. The backbone of SET is encryption. SET uses industrial strength encryption to reduce fraud and minimize risk to the parties involved. The main benefit of SET is to facilitate "financial transactions to take place in a trusted and spontaneous manner over the Internet, even between previously unknown parties". SET's three principal goals are: authentication, non-repudiation and integrity.

5. A trust model

Our analysis so far shows that consumer trust is facilitated by the existence of a BAM presence for an e-business. Many BAM enterprises use the e-business to augment their business. The key components of this trust model are the trusted seals, security and financial institutions (see Figure 1). Almost all financial institutions involved in e-business

transactions have a large presence in the BAM world. This reinforces the model's implication that trust is transferable. Consumers who have trust in a BAM enterprise are willing to translate that trust into an e-business component of the same enterprise. The model also shows the use of trusted third parties in building consumer trust for an e-business. The model shows further that the numerous other e-businesses without a BAM presence have multiple avenues to build consumer trust. Thus, all e-businesses must facilitate trust building in a variety of ways.

Conclusion

Trust is one of many factors that contribute to e-business success. There are many ways to build trust. It is an ongoing process that never stops. Many of the trust builders that apply in the BAM world apply to e-businesses as well. Since the e-businesses are accessible from anywhere at any time, there are additional impediments in building and maintaining trust.

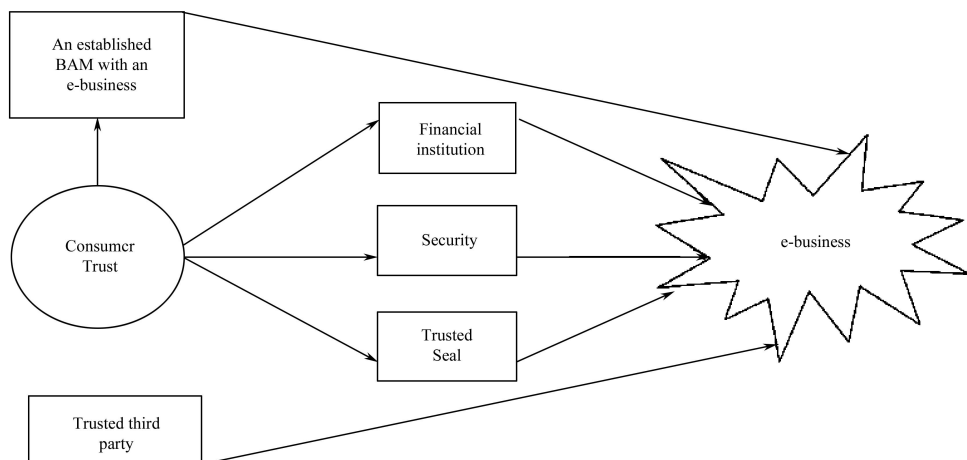


Figure 1 Trust Model

New Words

1. augur ['ɔ:gə] *v.* 占卜, 预言
2. ingredient [in'gri:diənt] *n.* 成分, 因素
3. literature ['litərətʃə] *n.* 文学(作品), 文艺, 著作, 文献
4. navigation [ˌnævi'geɪʃən] *n.* 航海, 航空, 导航, 领航, 航行
5. breeze [bri:z] *n.* 微风, 煤屑, 焦炭渣, 轻而易举的事, 小风波
v. 吹微风, 逃走
6. component [kəm'pəunənt] *n.* 成分
a. 组成的, 构成的
7. asymmetry [æ'simiri] *n.* 不对称
8. guarantee [ˌɡærən'ti:] *n.* 保证, 保证书, 担保, 抵押品

9. paramount ['pærəmaʊnt] *a.* 极为重要的
10. escrow ['es'krəʊ] *n.* 由第三者保存附带条件委付盖印的契约
11. bureau ['bjʊərəʊ] *n.* 局, 办公署
12. underwriter *n.* 保险业者, 承诺支付者, 保险商
13. rigorous ['rɪgərəs] *a.* 严格的, 严厉的, 严酷的, 严峻的
14. facilitate [fə'sɪlɪteɪt] *v.* (不以人作主语的)使容易, 使便利, 推动, 帮助, 使容易, 促进

Notes about Terms

1. SSL(Secure Socket Layer):安全套接层,可以简称为加密通信协议,使用 SSL 可以对通信(包括 E-mail)内容进行高强度的加密,以防止黑客监听通信内容甚至用户密码。

2. SET(Secure Electronic Transaction):安全电子交易,是由 VISA 和 MasterCard 两大信用卡公司于 1997 年 5 月联合推出的规范。SET 主要是为了解决用户、商家和银行之间通过信用卡支付的交易而设计的,以保证支付信息的机密、支付过程的完整、商户及持卡人的合法身份,以及可操作性。

3. Amazon:亚马逊,是一家财富 500 强公司,是全球电子商务的成功代表。它创立于 1995 年 7 月,总部位于美国华盛顿州西雅图。目前是世界上商品品种最多的网络零售商。

4. First Virtual:(美国)第一家虚拟(银行)。

5. Better Business Bureau:商业服务监督局,美国保护消费者权益机构。

6. Underwriter's Laboratories:保险商试验所,简称为 UL。UL 安全试验所是美国最权威的,也是世界上从事安全试验和鉴定的较大的民间机构。

7. digital seal:数字封印,是公钥密码体制在实际中的一个应用,用加密技术来保证只有规定的特定收信人才能阅读通信的内容。

Notes about Sentences

1. They get their exposure to the customers by means of other trusted organizations such as the Better Business Bureau whose seal they are authorized to use.

他们通过其他一些顾客认可的组织,如商业服务监督局来与顾客打交道,并且被授权使用其印章。

Exercises

I. Fill in the blanks according to the text.

Around the world, organizations like the Better Business Bureau and the Underwriter's Laboratories have earned the people's trust as 1 organizations that look out for the consumer. What they do in the BAM world 2 equally in the e-business world. They use their rigorous authentication means 3 a product or service. Once the product or service meets their strict standards, then the organization 4 the use of their seal in the business' Web site. The use of such a digital seal in a

company's Web site provides a 5 amount of trust for the ordinary consumer. This is yet another way for a business to start earning trust. There is one danger to the use of digital seals. Businesses bent on 6 consumers can easily copy the digital seal of a 7 organization and place it in their Web site. By the time such an abuse is noted it might be rather too late. The only way to overcome this 8 is to educate the consumers to follow what is done in the BAM world. When a customer is in doubt about the 9 of a business' claim the consumer calls a trusted third party and verifies the reputation of a business in question. The same thing can be very easily done 10 an online search of the digital seal provider.

II. Translate the following sentences into Chinese.

1. Two factors that significantly contribute to the success of e-business are the trust people place in the online businesses and how secure they feel in transacting business on the Internet.
2. Organizations such as Amazon.com have contributed significantly to the growth of software that makes placing orders a breeze.
3. Any bottleneck in this aspect will be a major factor in losing trust.
4. The primary role of agents is to act as intermediaries between several merchants and a whole lot of customers spread all over the world.
5. Since the e-businesses are accessible from anywhere at any time, there are additional impediments in building and maintaining trust.

III. Translate the following sentences into English.

1. 有几种工具可以用来加强网络的安全性。
2. 只要订购跟踪信息和订购经历相联合,这方面就不会成为缺点。
3. 在电子商务里,顾客和销售商极有可能天各一方,但同时却可以在一日之内登录到销售商的网站。
4. 因此,他们利用一些大的金融机构充当中间人来确保顾客付款给商家,同时又要使顾客确信他们对商家是否满意是至关重要的。
5. 在电子商务初期,许多人不愿在网上购物仅仅是因为他们担心网上购物的安全性。

IV. Answer the following questions.

1. What factors contribute to trust in e-business?
2. What's the role of intermediaries in building trust in e-business?

Text B Designing Trust into Online Experiences

Ancient social traditions were designed to elicit trust during uncertain encounters. Handshaking demonstrated the absence of weapons. Clinking of glasses evolved from pouring wine back and forth to prove it was not poisoned. Now, new social traditions are needed to enhance cooperative behaviors in electronic environments supporting e-commerce, e-services, and online communities.

Since users of online systems can't savor a cup of tea with an electronic rug merchant,

designers must develop strategies for facilitating e-commerce and auctions. Since users can't make eye contact and judge intonations with an online lawyer or physician, designers must create new social norms for professional services. Since users can't stroll through online communities encountering neighbors with their children, designers must facilitate the trust that enables collective action. In parallel, consumer groups must be vigorous in monitoring and reporting deceptions and disreputable business practices.

Political scientist Eric Uslaner of the University of Maryland calls trust "the chicken soup of the social sciences. It brings us all sorts of good things—from a willingness to get involved in our communities to higher rates of economic growth to making daily life more pleasant. Yet, like chicken soup, it appears to work somewhat mysteriously". He tries to sort out the mystery by distinguishing between moral trust, or the durable optimistic view that strangers are well-intentioned, and strategic trust, or the willingness of two people to participate in a specific exchange.

Trust facilitates cooperative behavior. It is a complex term that has generated dozens of doctoral dissertations, not only in sociology and political science, but now in information systems research as well. There are enough dimensions to trust and its failures to keep scholars and philosophers busy for some time, but e-commerce, e-services, and online community designers need a guide to practical action.

The designer's goal is to engage users quickly and establish and preserve strategic trust under challenging situations. But for many users, strategic trust is difficult to generate, shaken easily, and once shaken extremely difficult to rebuild. Strategic trust is fragile.

The extensive literature on trust offers multiple perspectives. In his politically oriented book *Trust*, Francis Fukuyama, a former U.S. State Department analyst, claims: "Trust is the expectation that arises within a community of regular, honest, and cooperative behavior, based on commonly shared norms, on the part of the members of that community". This compact definition embodies several key concepts—mostly that trust is about the future and concerned with cooperative behavior.

In shifting to electronic environments, B. J. Fogg and Hsiang Tseng of Stanford University focus on trust among individuals mediated by technology, writing that "trust indicates a positive belief about the perceived reliability of, dependability of, and confidence in a person, object, or process". To separate out the trust for a person from expectations about an object or process, I use the term, "rely on" (or "depend on") for the positive expectations about an object (such as computers, networks, and software) and process (such as credit card transactions and airline e-ticket reservations).

Computer scientists have concentrated on building reliable equipment; more recently, e-commerce and e-service providers have sought to encourage customers willing to use computer networks but who may be reluctant to type in their credit card numbers.

To provide a framework for online developers, I offer this definition of trust: The

positive expectation a person has for another person or an organization based on past performance and truthful guarantees. Trust is about expectations of the future. It accrues to individuals and organizations due to their previous good works and clear promises. It implies responsibility for behavior and willingness to make good for failures. It is stronger than reliance, due to the responsibility and guarantee that only people and organizations can offer. If users rely on a computer and it fails, they may get frustrated or vent their anger by smashing a keyboard, but there is no relationship of trust with a computer. If users depend on a network and it breaks, they cannot get compensation from the network. However, they can seek compensation from people or organizations they trusted to supply a correctly functioning computer or communication service. Understanding the explicit and contract-like nature of trust between people and organizations leads to clearer guidelines for developers and monitors of e-commerce, e-services, online communities, and other Web sites.

Principle 1. Invite participation by ensuring trust.

Users are more likely to participate in Web transactions and relationships if they receive strong assurances that they are engaging in a trusting relationship. They seek reliable reports about past performance and truthful statements of future guarantees. The branding process generates trust by using familiar logos and names of companies whose integrity is respected. Therefore, success is more likely if Web site developers apply the following guidelines.

Guideline 1. 1. Disclose patterns of past performance. Airlines report on-time percentages for flights, and realtors advertise how many homes they've sold. Reliable periodic self-reports of performance may attract users and inspire trust in future performance, as does information about the organization and its management, employees, and history. Openness about performance and personnel may engage and assure skeptical users.

Guideline 1. 2. Provide references from past and current users. Most people choose medical doctors by asking friends for references, but Web-based medical services are likely chosen by reading online comments from patients. One reason for eBay's (www.ebay.com) success with online auctions is its thoughtfully designed reputation manager (called Feedback Forum) enabling purchasers to record extensive comments on sellers.

Guideline 1. 3. Get certifications from third parties. Lawyers, doctors, and other professionals are certified by appropriate review boards, which may soon begin certifying certain online services. Seals of approval from consumer and professional groups, including the American Medical Association and American Bar Association, help establish trust through third-party reports. Logos from TRUSTe (www.truste.com) and BBBOnLine (www.bbbonline.org) and other third-party services that review online privacy practices may also inspire consumer trust, though only if they develop adequate enforcement.

Guideline 1. 4. Make it easy to locate, read, and enforce policies involving privacy and

security. Although privacy policies are widespread, some are so difficult to find and incomprehensible to read that they only undermine trust. Good policies are enforceable and verifiable, so consumers can be assured that the implementation matches the promise. Expectations are rising rapidly as consumers become informed. Therefore, well-designed policy statements accompanied by reports on effective enforcement will distinguish some Web sites. When violations occur, prompt action is expected.

Principle 2. Accelerate action by clarifying responsibility.

As soon as users begin the process of investigating a product or establishing a relationship, their emerging resistance can be reduced by clarifying responsibilities and obligations. A well-designed Web site should have orderly structure with convenient navigation, meaningful descriptions of products, and comprehensible processes for transactions. Good design can inspire trust. Simple statements of who-does-what-by-when are likely to speed cooperation.

For example, a seller who wants to inspire trust might promise to ship orders within 24 hours of receipt of payment or grant a 50% discount. An auction service that includes dispute-resolution policies and provides mediation services reduces the number of its potentially unhappy users. Restaurateurs who offer free desserts when meals are late know that prompt apologies and sincere efforts to repair problems (plus compensation for failures) can win customers for life. Since shallow commitments and broken promises are dangerously explosive, diligent attention to emerging problems is vital.

Guideline 2. 1. Clarify each participant's responsibilities. As with any contract or agreement, full disclosure in comprehensible and compact terms builds confidence and trust. When terms for transactions, such as price, delivery time, cost, taxes, fees, and return policies, are spelled out, users know what to expect and are not shaken by unpleasant surprises. Similarly, policies for online communities, such as how long logs are maintained, who has access to archives, and the limitations for threats or libel, generate feelings of safety and promote open discussion.

Guideline 2. 2. Provide clear guarantees with compensation. Since all Web providers are relative newcomers, they must overcome resistance to change and specific fears about credit card abuse, privacy invasion, security risks, and interface failures. Guaranteed protection from credit card fraud is a necessary, though not sufficient, starting point. Compensation for delayed delivery is relatively easy to specify, but reputation records, authentication, and escrow—all parts of eBay's Safe Harbor procedures—could facilitate successful transactions.

Guideline 2. 3. Support dispute resolution and mediation services. Inevitably, a product or service disappoints some users, and when the standard response fails to satisfy them, there is a problem. A crushed delivery box, a delayed medical lab report, or a breach of privacy can each make for unhappy users who are not placated with an apology or some free service. Customer service managers earn their salaries by handling unhappy

users with an appropriate response, but innovative strategies are needed on the Web to avoid litigation or better still to satisfy users and win their loyalty. Organized customer services are necessary, but third-party facilitators and mediators are becoming advisable.

These principles and guidelines are merely a starting point for designers and a challenge to researchers. They need to be refined and validated in field trials and carefully controlled empirical studies in order to better understand the costs and benefits associated with different user groups.

Reading Materials

Competing for Eyeballs by Branding

As a small company, you need to be concerned with attracting your target market to your brand. If you can distinguish your product or service from the competition, you will be ahead of the game. And you may even win over some customers from the larger competitors.

Having a recognizable brand doesn't necessarily mean that your business will be universally known. It simply means that you are increasing your chance to compete successfully for attention and market share in the appropriate space. It doesn't take an expensive global advertising campaign to brand your business.

First of all, identify your target market. Without knowing who your customers are and what their likes and dislikes are, your branding efforts will be in vain. Informal surveys, focus groups, magazines such as *American Demographics*, census information, and research reports can all be helpful in determining your niche. In addition, trade magazines for your industry may point you in the right direction.

Once you have identified your target market, remember that customers are bombarded by ads and brands, and it is virtually impossible for them to distinguish among all the messages. As a result, you need to cut through the noise. Differentiation is key for any product or service. A name, logo, and domain name are the obvious and necessary steps in creating a brand message that will set you apart from the competition.

You can either work independently to come up with a logo and name or you can work with a branding consultant to come up with a package containing logo, brand, tagline, and so on. Branding consultants can be expensive, but will give you professional results that will make a difference in the long run. There are numerous branding consultants, both big and small, so try getting a referral from colleagues. Or if there's a company whose logo and branding efforts you particularly admire, call them up and see if they can recommend a consultant.

Take your brand development seriously, and invest what is necessary to have a company help you achieve your goals. Make sure you are able to communicate your company's positioning and core values. If you can't articulate what differentiates you from your competitors to your branding consultant, chances are they won't be able to communicate it to your customers. They need clear direction from which to craft a memorable, differentiated brand.

Once you have a brand identity, you can focus on marketing your company to your target market on the Web. There are numerous ways to accomplish this:

- Build a Web site.
- Advertise on Web sites.
- Optimize your site for search engines.
- Register with search engines and directories.
- Collect email addresses and send out an email newsletter.
- Write a Weblog.

Branding can be a time-consuming process that requires a lot of patience waiting for your efforts to come into fruition. Don't be tempted to constantly tinker with your brand. Instead, work on getting your name out there. As a result, you may find customers that appreciate your attention to detail and your personalized service.

Unit 16 Electronic Commerce Planning

Text A Planning Electronic Commerce Initiatives

The ability of companies to plan, design, and implement cohesive electronic commerce strategies will make the difference between success and failure for the majority of them. The tremendous leverage that firms can gain by being the first to do business a new way on the Web has caught the attention of top executives in many industries. The keys to successful implementation of any information technology project are planning and execution. A successful business plan for an electronic commerce initiative should include activities that identify the initiative's specific objectives and link those objectives to business strategies.

Identifying Objectives

Businesses undertake electronic commerce initiatives for a wide variety of reasons. Objectives that businesses typically strive to accomplish through electronic commerce include: increasing sales in existing markets, opening new markets, serving existing customers better, identifying new vendors, coordinating more efficiently with existing vendors, or recruiting employees more effectively.

The types of objectives vary with the size of the organization. For example, small companies might want a Web site that encourages site visitors to do business using existing channels rather than through the Web site itself to reduce the cost of the site. A site that offers only product or service information is much less expensive to design, build, and maintain than a site that offers transaction handling, bidding, communications, or other capabilities. Decisions regarding resource allocations for electronic commerce initiatives should consider the expected benefits and costs of meeting the objectives. These decisions should also consider the risks inherent in the electronic commerce initiative and compare them to the risks of inaction—a failure to act could concede a strategic advantage to competitors.

Linking Objectives to Business Strategies

Businesses can use tactics called downstream strategies to improve the value that the business provides to its customers. Alternatively, businesses can pursue upstream strategies that focus on reducing costs or generating value by working with suppliers or inbound shipping and freight service providers.

The Web is a tremendously attractive sales channel for many firms; however, companies can use electronic commerce to do much more than selling. They can use the Web to complement their business strategies and improve their competitive positions.

Electronic commerce opportunities can inspire businesses to undertake activities such as:

1. Building brands
2. Enhancing existing marketing programs
3. Selling products and services
4. Selling advertising
5. Developing a better understanding of customer needs
6. Improving after-sale service and support
7. Purchasing products and services
8. Managing supply chains
9. Operating auctions
10. Building virtual communities and Web portals

Measuring both benefits and costs is becoming more important. A good implementation plan should set specific objectives for benefits to be achieved and costs to be incurred. In many cases a company will create a pilot Web site to test an online business idea and then release a production version of the site when it works well. Companies must specify clear goals for their pilot tests so that they know when the site is ready to go into full operation.

Measuring Benefits

Some benefits of electronic commerce initiatives are tangible and easy to measure. These include such things as increased sales or reduced costs. Other benefits are intangible and can be much more difficult to measure, such as increased customer satisfaction. When identifying benefit objectives, managers should try to set objectives that are measurable even when those objectives are for intangible benefits. For example, success in achieving a goal of increased customer satisfaction might be measured by counting the number of first-time customers who return to the site and buy.

Many companies create Web sites to build brands or enhance their existing marketing programs. These companies can set goals in terms of increased brand awareness. Companies that sell goods or services online can measure sales volume in units or dollars. Companies that want to use Web sites to improve customer service or after-sale support might set goals of increased customer satisfaction or reduced costs of providing customer service or support.

Companies can use a variety of similar measurements to assess the benefits of other electronic commerce initiatives. Supply chain managers can measure supply cost reductions, quality improvements, or faster deliveries of ordered goods. Auction sites can set goals for the number of auctions, the number of bidders and sellers, the dollar volume of items sold, the number of items sold, or the number of registered participants. No matter how a company measures the benefits provided by its Web site, it usually tries to convert the raw activity measurements to dollars.

Managing Costs

Many managers have found that information technology project costs can be as

difficult to estimate and control as the benefits of those projects. Since Web development uses hardware and software technologies that change even more rapidly than those used in other information technology projects, managers often find that their experience does not help much when they are making estimates. Most changes in the cost of hardware are downward, but the increasing sophistication of software provides an ever increasing demand for more of the newer, cheaper hardware. This often yields a net increase in overall hardware costs. The more sophisticated software, of course, usually costs more than the amount originally budgeted, too. Even though electronic commerce initiatives tend to be completed within a shorter time frame than many other information technology projects, the rapid changes in Web technology can quickly destroy a manager's best-laid plans.

Comparing Benefits to Costs

Most companies have procedures that call for an evaluation of any major expenditure of funds. These major investments in equipment, personnel, and other assets are called capital projects or capital investments. The techniques that companies use to evaluate proposed capital projects range from very simple calculations to complex computer simulation models. However, no matter how complex the technique, it always reduces to a comparison of benefits and costs. If the benefits exceed the costs of a project by a comfortable margin, the company invests in the project.

A key part of creating a business plan for electronic commerce initiatives is the process of identifying potential benefits (including intangibles such as employee satisfaction and company reputation), identifying the costs required to generate those benefits, and evaluating whether the benefits exceed the costs. Companies should evaluate each element of their electronic commerce strategies using the cost/benefit approach.

Return on Investment (ROI)

You might have learned techniques for capital project evaluation, such as the payback method, the net present value method, or the internal rate of return method, in your accounting or finance courses. These evaluation approaches are called return on investment (ROI) techniques because they measure the amount of income (return) that will be provided by a specific current expenditure (investment). ROI techniques provide a quantitative expression of a comfortable benefit-to-cost margin for a specific company. They can also mathematically adjust for the reduced value of benefits that the investment will return in future years (benefits received in future years are worth less than those received in the current year).

New Words

1. cohesive [kəu'hi:siv] *a.* 黏着的
2. initiative [i'nɪʃiətɪv] *n.* 主动, 启动, 主动性, 积极性
3. strive [straɪv] *v.* 努力, 奋斗, 力争, 斗争

4. coordinate [kəu'ɔ:dɪnɪt] *n.* 同等者, 同等物, 坐标(用复数)
 - a. 同等的, 并列的
- [kəu'ɔ:dɪneɪt] *v.* 调整, 整理
5. recruit [rɪ'krʊt] *n.* 新兵, 新分子, 新会员
 - v.* 使恢复, 补充, 征募
6. bidding ['bɪdɪŋ] *n.* 命令, 出价, 邀请
7. allocation [ælə'keɪʃən] *n.* 分配, 配置
8. inherent [ɪn'hɪərənt] *a.* 固有的, 内在的, 与生俱来的
9. concede [kən'si:d] *v.* 勉强, 承认, 退让, 让步
10. tactics ['tæktɪks] *n.* 战术, 策略
11. specify ['spesɪfaɪ] *v.* 指定, 详细说明, 列入清单
12. tangible ['tændʒəbl] *a.* 切实的, 实体的, 有形的
13. convert [kən'veɪt] *v.* 使转变, 转换……
14. raw [rə:] *a.* 未加工的, 生疏的, 处于自然状态的
15. sophistication [səfɪstɪ'keɪʃən] *n.* 复杂, 精密, 高级

Notes about Sentences

1. after-sale service: 售后服务。
2. supply chain managers: 供应链管理, 供应链是一个相互关联的设施和分布网络, 将采购的原材料加工成中间或最终产品, 并将这些产品交付给最终客户。

Exercises

I. Fill in the blanks with the proper forms of the given words.

automate	supply	available	associate	standard
reduce	purchase	track	able	simple

There are many customer benefits as outlined hereunder:

Enables you 1 and control the procurement process.

Brings an online catalog to your desktop through a normal Web browser, so you can 2 which products you want to buy from which 3. Considerably reduces both processing and material costs. Saves to an extent of 70 percent on the transaction costs 4 with the purchasing process such as price and 5 checks, purchase order 6 and status tracking and as much as 15 percent on the cost of goods 7. 8 purchasing staff to focus on more strategic tasks.

Increases efficiencies providing quick ROI through cost 9 and increased revenues through customer self service, automation of order processing, and greatly 10 catalog content management.

II. Translate the following sentences into Chinese.

1. The ability of companies to plan, design, and implement cohesive electronic

commerce strategies will make the difference between success and failure for the majority of them.

2. Businesses undertake electronic commerce initiatives for a wide variety of reasons.
3. However, companies can use electronic commerce to do much more than selling.
4. Some benefits of electronic commerce initiatives are tangible and easy to measure; Other benefits are intangible and can be much more difficult to measure.
5. These companies can set goals in terms of increased brand awareness.

III. Translate the following sentences into English.

1. 人们对于网络的看法因人而异。
2. 本单元的内容重点讲述如何计划电子商务方案。
3. 这家网站上的商品价格从几美元到数百美元不等。
4. 无论这些问题有多复杂,我们也要在一个月内把它们解决了。
5. 学生们正在努力提高自己的电子商务知识。

IV. Answer the following questions briefly.

1. Why do businesses plan electronic commerce initiatives?
2. What is a successful electronic commerce initiative?

Text B Managing Electronic Commerce Implementation

The best way to manage any complex electronic commerce implementation is to use formal management techniques. Project management, project Portfolio management, specific staffing and postimplementation audits are methods businesses use to efficiently administer their electronic commerce projects.

Project Management

Project management is a collection of formal techniques for planning and controlling the activities undertaken to achieve a specific goal. Project management was developed by the U. S. military and the defense contractors that worked with the military in the 1950s and the 1960s to develop weapons and other large systems. Not only was defense spending increasing in those years, but individual projects were becoming so large that it became impossible for managers to maintain control over them without some kind of assistance.

The project plan includes criteria for cost, schedule, and performance it helps project managers make intelligent trade-off decisions regarding these three criteria. For example, if it becomes necessary for a project to be completed early, the project manager can compress the schedule by either increasing the project's cost or decreasing its performance.

Today, project managers use specific application software called project management to help them manage projects. They give managers an array of built-in tools for managing resources and schedules. The software can generate charts and tables that show, for example, which parts of the project are critical to its timely completion which pans can be rescheduled or delayed without changing the project completion date, and where additional

resources might be most effective in speeding up the project.

In addition to managing the people and tasks of the internal team, project management software can help the team manage the tasks assigned to consultants, technology partners, and outsourced service providers. By examining the costs and completion times of tasks as they are completed, project managers can learn how the project is progressing and continually revise the estimated costs and completion times of future tasks.

Information systems development projects have a well-deserved reputation for running out of control and ultimately failing. They are much more likely to fail than other types of projects, such as building construction projects. The main causes for information systems project failures are rapidly changing technologies, long development times, and changing customer expectations. Because of this vulnerability, many teams rely on project management software to help them achieve project goals.

Although electronic commerce certainly uses rapidly changing technologies, the development times for most electronic commerce projects are relatively short—often they are accomplished in under six months. This gives both the technologies and the expectations of users less time to change. Thus, electronic commerce initiatives are, in general, more successful than other types of information systems implementations.

Project Portfolio Management

Larger organizations often have many IT implementation projects going on simultaneously a number of which could be electronic commerce implementations or updates. Some chief information officers (CIOs) of larger companies now use a portfolio approach to managing these multiple projects. Project portfolio management is a technique in which each project is monitored as if it were an investment in a financial portfolio.

The CIO records the projects in a list (usually using spreadsheet or database management software) and updates the list regularly with current information about each project's status.

Project management software performs a function similar to this for the tasks within a project, but most project management software packages are designed to handle individual projects and do not do a very good job of consolidating activities across multiple projects. Also, the information used in project portfolio management differs somewhat from the information used to manage specific projects. Project management software tracks the details of how each project is accomplishing its specific goals. In project portfolio management, the CIO assigns a ranking for each project based on its importance to the strategic goals of the business and its level of risk (probability of failure). To develop these rankings, the CIO can use any of the methods that financial managers use to evaluate the risk of making investments in business assets.

Staffing for Electronic Commerce

Regardless of whether the internal team decides to outsource parts of the design and implementation activity, it must determine the staffing needs of the electronic commerce initiative. The general areas of staffing that are most important to the success of an electronic commerce initiative include:

- Business manager
- Project managers
- Account managers
- Applications specialists
- Web programmers
- Web graphics designers
- Content creators
- Content managers or editors
- Customer service reps
- Systems administrators
- Network operators
- Database administrators

The business management function should include internal staff. The business manager should be a member of the internal team that sets the objectives for the project. The business manager is responsible for implementing the elements of the business plan and reaching the objectives set by the internal team. If revisions to the plan are necessary as the project proceeds, the business manager develops specific proposals for plan modifications and additional funding and presents them to the internal team and top management for approval.

The business manager should have experience and knowledge related to the business activity that is being implemented on the electronic commerce site. For example if business managers are assigned to a retail consumer site, they should have experience managing a retail sales operation.

In addition to including the business manager, the business management function in large electronic commerce initiatives may include other individuals who carry out specialized functions, such as project management, account management, etc. .

Postimplementation Audits

After an electronic commerce site is successfully launched, most of the project's resources are devoted to maintaining and improving the site's operations. However, an increasing number of businesses are realizing the value of a postimplementation audit. A postimplementation audit (also called a postaudit review) is a formal review of a project after it is up and running.

The postimplementation audit gives managers a chance to examine the objectives, performance specifications, cost estimates, and scheduled delivery dates that were established for the project in its planning stage and compare them to what actually happened.

A postimplementation audit allows the internal team, the business manager, and the project manager to raise questions about the project's objectives and provide their "in-the-trenches" feedback on strategies that were set in the project's initial design.

The audit should result in a comprehensive report that analyzes the project's overall performance, how well the project was administered, whether the organizational structure was appropriate for the project, and the specific performance of the project team(s). Each section of the report should compare actual results to the project's objectives. Many companies modify their project management organization structure after completing each project based on the contents of postaudit review reports. Many companies also include a confidential section in the report that evaluates each team member's performance on the project. Summaries of member performance can help managers decide which employees should be included in future team projects.

Reading Materials

How to Choose the Right E-Commerce System

When you decide to open an online store, you face a range of options, from outsourcing everything to doing it all yourself. Choosing the software that will run your store is a complex process, and even if you don't plan to do it yourself you'll still need enough information to make informed choices. To help make up your mind, run through this summary of your choices, along with their advantages and drawbacks.

Build your own system. When you build your own online store, you have full control. You can customize each aspect of the site to optimize performance and to integrate with existing inventory, accounting and other legacy systems. You can tinker with your store until you get it just the way you want it, and you can quickly change it to take advantage of emerging opportunities.

Several vendors offer tools that help you build a custom online store. Companies such as Microsoft and Macromedia offer e-commerce toolkits that provide the technology and the development tools for building an e-commerce site. These toolkits include the basic software components that run an online store, software “hooks” that can link to databases or other back-end systems, and even their own programming languages.

If you plan to build an online store from the ground up, you must be prepared to do some very basic development, using your own code to stitch together the various database, tax, shipping, fulfillment and page-serving modules that will make up the finished site. These are time-consuming jobs, and your store will take longer to build than an off-the-shelf system. Even a basic custom store will cost you at least \$10,000, and many stores cost hundreds of thousands of dollars to build and maintain. The bottom line is that unless you have some very good reasons for building your own system, you're better off using an existing e-commerce tool. (For more, read [Why Can't You Build Your Own Web Site?](#))

Buy an existing system. Many vendors produce e-commerce packages that are suitable for a variety of business needs. By mixing and matching features within these packages, you can create a sophisticated e-commerce site in fairly short order.

Basic e-commerce systems usually offer prebuilt store templates or “wizards” that guide you through the setup process and help you get your store up and running. They also come with ready-to-use shopping cart software that stores your customers' purchases as they select them, calculates prices, collects a customer's information and then submits credit card information to your bank. More advanced e-commerce systems let you import and publish existing product catalogs on the Web and tie your online store to a database or other systems.

You do give up some flexibility, both now and in the future, if you choose an off-the-shelf system. Many of these tools place strict limits on how you can customize your shopping cart, catalog and even the “look and feel” of your online store. Even so, most businesses find e-commerce software that meets their needs, and the fact that vendors provide service, support and even systems-integration help is a major advantage. (For a detailed look at such services, read All Business.com’s The Scoop on Business Web Site Hosting Services.)

Partner with an e-commerce provider. The fastest and easiest solution is to sign up with a service that builds and hosts your storefront for you. You don’t need any hardware, software or technical expertise of your own—in fact, all you need is a business name and a list of products. Some storefront providers charge monthly flat rates based on the number of items in your online catalogue, while a few take a percentage of your sales. These services offer month-to-month e-commerce leases, and they handle all of the transaction processing, Web serving, backups and so forth. Some e-commerce services will even set up a merchant account if you don’t already have one.

E-commerce providers are the least expensive way to build an online store, but they’re also the least flexible. Most providers offer a limited set of options for customizing your store, and you may find that all of the stores on a provider’s site share the same basic look and feel. And, while most providers are reputable businesses, some services could impose hidden charges or cut corners on security and reliability. Always do your homework, check a provider’s background, and above all shop around before you settle on an e-commerce provider.

第 1 单元 课文 A: 电子商务概要

我们在公司会议室里、管理会议中、新闻和报纸(包括印刷出来的和在线的)上,甚至在美国国会山经常能够听到电子商务这一术语。电子商务是我们进入 21 世纪以来最常用的商务用语。那么电子商务到底是一个什么样的概念?在未来的几年它是否仍然重要?或者仅仅只是又一个被滥用后丢弃的时髦用语?本文中我们将探讨电子商务的定义、分类及其对商务模式和价值链的影响。

1. 电子商务的定义

不同的学者对于电子商务有不同的定义。Marilyn Greentein and Todd M. Feinman 将电子商务定义为:电子传输媒体(电子通信)在交换中(包括产品和服务买卖)的使用,这些产品或服务需要从一个地方到另一个地方的运输,其中运输包括人力运输和数字运输。Electronic Commerce 与 Electronic Business 的不同在于前者是狭义的,没有全面地囊括借助通信设备进行的许多类型的信息交换这个本质属性。实际上,电子商务的概念还包括那些与实际商品买卖行为不直接联系的信息交换。越来越多的企业开始使用电信设备来发布信息 and 提供客户支持。这也已经不单纯属于“商务”活动而是“商业”活动。因此 Electronic Business 应用更为广泛并且将来会最终取代 Electronic Commerce。尽管本文大多采用 Electronic Commerce 这个词,但对于许多商业活动则应更准确地描述为 Electronic Business。

Kalakota and Whinston (1997)从以下几个角度定义电子商务:

从通信的角度看,电子商务是指通过电话、计算机网络或者其他电子手段来传递信息,产品/服务或者支付。

从商务活动的流程来看,电子商务是指将商业交易及工作流程自动化的技术应用。

从服务的角度来看,电子商务是一种用来满足厂商及消费者的需要,设法降低服务和管理成本,提高产品质量和加快服务速度的工具。

从在线的角度来看,电子商务能够实现在互联网上买卖产品和信息以及其他网上服务。

IBM 的总裁 Lou Gerstner 说:“电子商务和许多事情有关,包括商业周期、速度、全球化、生产力增加,获得新的客户,以及跨机构进行知识分享以获取竞争优势,等等。”

电子商务领域的专家李琪教授从生产力的角度来定义电子商务。他认为应该从两方面来下定义,广义的电子商务是指利用电子通信工具来进行商务活动。这里所说的电子通信工具包括早期的电报、电话,到现代的 NII(国家信息基础设施)、GII(全球信息基础设施)和互联网。这里所说的商务活动是指除了典型的生产过程以外的一切合法的需求和消费活动。狭义的电子商务是指在技术和经济高度发达的社会,那些掌握信息技术和商务规则及法规的人们利用电子工具,系统地、有效率地、低成本地参与到各种以交换商品和服务为中心的整个过程。第一个定义可以简称为商务化的电子应用,第二个定义可简称为电子商务系统。

EDI(电子数据交换)是电子商务的一个分支,两者的区别主要在于电子商务涵盖的商务环境比 EDI 更广。传统的电子数据交换系统使我们可以与已经确立的贸易伙伴电子化地交换商务数据,而绝大多数电子数据交换系统主要是以购买功能为核心。这些电子数据交换系统大多执行起来成本很高,使得许多中小企业无法参与电子数据交换。电子商务便构成一个买卖双方“见面”并且相互交易的市场。

2. 根据交易的性质对电子商务分类

电子商务一般按照其交易性质分类,可分为以下几个类型:

企业对企业的电子商务(B2B)。今天大多数电子商务都属于这一类,它包括组织间交易和组织间的电子市场交易。

企业对个人的电子商务(B2C)。它主要是与个体顾客进行的零售交易。亚马逊网站最典型的顾客就是它的消费者或者客户。

消费者对消费者(个人对个人)的电子商务(C2C)。这类电子商务是指消费者直接销售给消费者。例如个人在分类广告网站(如 www.classified2000.com)发布广告以及销售个人房屋资产、轿车,等等。个人对个人的电子商务另一个例子就是在互联网上发布个人服务广告和将知识及专家经验作为商品出售。许多拍卖网站也允许个体提供项目来进行拍卖。于是,许多人利用企业内部互联网和其他组织的内部网站来发布销售或服务的广告。

企业对企业的电子商务(C2B)。这一类包括个人向组织推销产品或服务,以及个人寻找卖家、与卖家互动,并最终达成交易。

非商业性电子商务(Nonbusiness EC)。越来越多的非商业机构,如各种学术机构、非营利性组织、宗教组织、社会团体和政府机构,正在利用各种电子商务形式来削减开支(如改善采购活动),或改善其运作和客户服务。

企业内部或组织内部电子商务[Intrabusiness (organizational) EC]。在这一类型中,包括所有的组织内部活动,这些活动通常是在内部网上进行的,活动涉及商品服务和信息交换,从将商品卖给员工到在线培训以及减少成本的一系列活动都属于此。

需要注意的是,我们把组织间系统(IOS)看成 B2B 电子商务的一部分,另一方面,电子市场可以与 B2B 或者 B2C 联系起来。

3. 电子商务对商务模式和价值链的影响

电子商务的出现迫使企业重新思考他们传统的商业模式。如今具有超前思维的 CEO 们已经认识到了电子商务作为一种商业战略带来的挑战,它不仅仅是带给信息系统部门(或者是现有的 EDI 小组)的另一项技术。尽管一个进行了内部业务流程的重组或者艰难地安装了 ERP(企业资源计划)系统的公司的后台办公很无效率,但电子商务是关于外向流程重组的,是产业流程的重组。

因此,电子商务不仅是一项技术,而且是企业开展业务的一种方式,并且可以潜在地影响到企业价值链的每一个方面。为了全面执行,创新应用电子商务,管理团队观察市场的视野应当超越传统的有形边界。Enix 咨询有限公司认为:电子商务的开拓者遇到的最大问题就是思想的界限,它限制了人们的思考。我们倾向于从“工业时代”的范式去思考网络,在这种范式里任何事物都必须从物质世界的角度来说明,并且与物质世界联系起来。

如果电子商务的应用没有一个合适的商业环境,并且其商务策略没有与整个商务战略联系起来的话,那么电子商务的应用就可能会失败。因此,新的商务模式需要将电子商务采用与总体的商业目标整合起来。

传统观念上的价值链已经不足以涵盖由信息流联系起来的企业、客户,以及供应商之间的真实关系。传统的价值链通常将信息系统的数据传输描绘为依次通过输入/输出程序传递给位于价值链后端的供应者和位于价值链前端的客户的过程。在现实中,参与电子商务的企业可能在价值链的许多环节与客户和供应商进行信息共享。公司的信息系统就好比是“胶水”,将公司流程的所有阶段连接起来。这种以客户为导向的价值链实际上使得客户在每一个阶段都能够进入公司(供应商)的信息系统,了解订单的处理情况。客户和一个公司在签订销售合同前,可以链接到该公司的库存数据去了解价格、数量及是否能够获得等信息。另外,客户还可以事先通过电子手段收到设计方案和产品规格。实际的销售情况可以通过电子方式保存,并且供应商可以通过信息系统以电子化的方式向客户提供承诺的或预期的收货日起。一旦下了订单,客户可以对所定购的商品/服务的状态进行追踪。客户对于供应商的宗旨在于为客户提供更好的售后服务的信息系统的使用是电子商务的另一个积极应用。

顾客导向的价值链还要求将公司的采购信息系统与供应商的采购信息系统连接起来。企业必须进入它的供应商的信息系统,这样才能为其自己的客户提供最好的服务。于是,企业变成它自己的供应商的客户,将自己的采购系统与供应商的信息系统衔接起来,以获得相同类型的信息去提供给企业自己的客户。

因特网给予公司充分地整合他们的供应链的能力,这种整合将对参与供应链全面整合的公司结构产生重大的影响。

第 2 单元 课文 A: 计算机网络

计算机网络是指任何能使人们的计算机之间相互连接的技术。计算机网络及将全世界计算机网络相互连接起来的因特网共同构成了所有电子商务的技术结构基础。

因特网

每天有数百万的用户在使用因特网,但真正了解因特网是如何运作的,只是其中极少部分的用户。因特网是使跨全球的计算机网络连接起来的一个庞大的系统。使用因特网,你可以通过电子邮件的方式与遍布全世界的用户进行交流;可以在线阅读报纸、杂志、学术刊物及书籍;可以加入各种群体讨论几乎任何可以想到的主题;还可以下载免费的计算机软件。因特网在最近几年已经可以实现电子商务企业之间,以及电子商务企业与消费者之间的连接。如今,各种行业都在因特网上提供它们产品的信息和服务,其中许多行业直接使用因特网进行商品和服务的销售。

因特网是一种奇异的现象。它起源于 1969 年的一个军事项目,后来被研究机构和学术团体采用,成为世界计算机爱好者的工具(或玩具)。然后,用了两年的时间,因特网变成了推动世界进入信息化时代和 21 世纪的动力。

因特网也是一种有趣的现象,因为它不属于任何个人,与过去的铁路、电报和电话公司不同,属于大型个人公司或被国家垄断。因特网是一种信息和通信技术的使用模式,这种模

式是任何及所有的电信基础设施提供商所不能具备的。

在技术层次上,因特网是由通信协议,即传输控制协议/网际协议(TCP/IP)来定义的,而不是通信设备。

在另一个层次,因特网是由其用户定义的,即那些提供信息,发送消息,访问网站的人们,以及在电子商务环境下的买家和卖家。

因特网不是第一个也不是唯一的国家性或国际性的数据网络。其他数据网络已经被跨国组织,EDI 增值服务提供商和 CompuServe 等公共网络访问接入公司连接在了一起。尽管因特网缺少正规的控制和规划,但是却最终发展成为全球性的计算机网络,可能它的成功正是由于没有这种正规控制的存在。

因特网的发展

因特网的诞生可以追溯到 1969 年由美国国防部委托的一个叫 ARPA 计算机网的军事项目。它的目标是研究一种信息包交换技术,从而建立一种分布式控制网络,使得这种网络即使其某些节点和链路在核战中遭到破坏也能继续运作。ARPA 计算机网于 1972 年的后半年在华盛顿首次公开展示,这是包交换技术的第一次公开亮相。

在 20 世纪 70 年代后期和 80 年代初期,更进一步的实验性网络被开发出来,并主要用于大学各系之间的电子邮件传输。1981 年,CSNet (Computer Science Network,计算机科学网)被开发建立,而美国军方也于 1983 年从 ARPAnet 计划中分离出去。更进一步的学术网络被创建出来,提供到超级计算机中心的链接,特别是 1984 年英国的 JANET(联合学术网)和 1986 年美国的 NSFNET(国家科学基金网)。

TCP/IP 协议在 1982 年开发出来并在 1983 年 1 月初被引入到 ARPAnet。基于 TCP/IP 协议而开发使用的应用协议包括文件传输协议 FTP,电子邮件协议 SMTP 及远程登录终端协议。TCP/IP 协议引入了 IP 地址的概念,IP 地址是由多个部分组成的数字代码,这些代码被用来识别网络中的所有节点。在电子邮件和网站地址中 TCP/IP 地址也可以用代表同等意义的字母进行描述。

1989 年,在瑞士的日内瓦,欧洲粒子物理实验室的科学家们开发了一种网络工具,这种网络工具可以被用来把所有实验室研究人员所提供的信息链接起来。这种工具能把位于不同计算机、由不同研究人员创造的文本信息链接起来。其目的是克服计算机不兼容的问题,以及利用一种新的称作超文本的链接方式。与线性或分级数据输出方式不同,超文本可以将信息以网站形式的结构链接在一起。信息节点之间以多重方式建立链接。最终,用户可以用最便利的规则将网站信息交织起来,Berners—Lee 把他的超链接 HTML 文件系统命名为 World Wide Web,即万维网。

1993 年,伊利诺斯州立大学的国家超级计算机应用中心进一步地推进欧洲粒子物理研究所的创意,开发了名为 Mosaic 的软件工具。Mosaic 易于使用,采用允许文本、图像、声音和视频超链接的图形用户界面,它是第一个被称为网页浏览器的因特网工具。

Gopher 是另一种信息访问工具,几乎与 WEB 在同一时期开发。它提供了一系列访问具有某些特征文档的菜单。Gopher 曾一度在美国广泛使用,但是现在很大程度上已经败于更为广泛应用的 Web。

Netscape 是第一款商用的网页浏览器。美国 Netscape 公司创立于 1994 年,公司包括

了一些参与 Mosaic 项目的程序员。在比尔·盖茨进军因特网一段时间以后(有些人认为在很晚以后),微软发布了它自己的 IE 浏览器。在 Netscape 占据网页浏览器统治地位而微软又习惯性地希望占据支配地位情况下,随之而来出现了一段被称为“浏览器大战”的时期。微软利用其在微机操作系统市场的统治优势,在新的微机上都预装了其浏览器。Netscape 抗议微软这种反竞争行为,而微软则坚持认为因特网界面是其操作系统设计的中心,争端最终被付诸法律。Netscape 和 IE 通过在它们的浏览器中增加特色(或特性)相互竞争。这种附加特性并不总是与其他的浏览器或超文本标识语言的标准相兼容,这使得网页设计工作在这个过程中更加困难(网页制作者并不能确定用户将使用什么浏览器)。另一方面,从用户的角度看,浏览器现在变成了可免费的产品。Netscape 和 IE 通过因特网服务提供商、邮寄光盘和网站提供的可下载安装包等方式向数千万的潜在用户分发它们的产品。

在浏览器和客户端计算机的另一端,则是服务器系统所安装的软件。与客户端一样,服务器可能是几种形式中的任何一种,UNIX 操作系统和(大型)计算机是最常见的选择。因特网服务软件可以从 Netscape 和 Microsoft 的供应商那里获得,两个都不错,也可以从 Apache 的供应商那里获得。Apache 是公共领域的产品,它被广泛地应用于装有 Linux 操作系统的 UNIX 机器上。

除了浏览器大战之外,还需要在网络应用中增加一些逻辑和系统界面。一直以来最常见的办法是使用 Perl 编程语言所作的公共网关接口程序,(或者其他编程语言提供的类似设施)。最近,太阳微系统公司的 Java 语言和微软的 ActiveX 产品才刚发布,它们具有实现同样功能的能力。

1994 年大约有 500 个网站,一年之后增加到将近 10,000 之多,这本书中收集的任何有待更进一步统计的数据等到读者阅读的时候可能都已过时。

第 3 单元 课文 A:经济学和电子商务的互动

所谓电子商务,是指通过电子手段在因特网上从事商务活动的行为。电子商务有两个与其他商务活动相区别的重要特征。第一个特征,即“在因特网上”。因特网是将各个独立的计算机网连接起来的电子实体。因此,将电子商务的定义局限于在因特网上从事的交易,其包含的活动范围将小于在其他的研究中可能发现的范围。例如,自动取款机允许用户通过自动取款机网络以电子化手段进行金融交易(取钱,存款,转账)。由于自动取款机交易不是在因特网上进行的,因此被排除在电子商务定义范围之外。相反,如果用户是通过电脑使用浏览器访问银行账户,完成以上操作,则是电子商务。同样的逻辑,使用电子零售信贷和信用卡在加油站或当地商店购买商品也同样排除在外,但是如果消费者使用信用卡在因特网的旅游网站,比如 Orbitz.com 支付机票和旅店预定,则是电子商务。

万维网是最受欢迎和普遍应用的网络技术。万维网提供了一种对用户技术要求较低而又快速访问电子商务网站的途径。万维网技术可以传递色彩,图表,动画,声音等,所有这些使得电子商务活动变成了更加有趣的经历,也是一个潜在地增长见识的经历。

电子商务定义的第二个特征与“从事商务活动”这个短语有关。传统上这个短语是与商品或服务的买卖行为相关的。然而,基于因特网提供免费服务信息同样被认为是通过电子商务“从事商务活动”的一部分。如果信息提供商这样做的目的是以某种方式,例如,获得网

站的广告收益或者从免费服务链接到收费服务等获得当前或未来的交易利润,那么这种解释就是站得住脚的。雅虎提供免费搜索信息和许多免费服务,包括电子邮件,以此希望吸引阅读者支持横幅广告并接受其某些收费服务。

因特网最初走进生活中是在 1969 年,刚开始时是作为一种传输工具服务于大学和政府计算机网络之间的科学信息传输。因特网被引入作为电子商务的载体仅开始于 90 年代初。相反地,经济学作为一种社会科学最早出现在 1776 年,按传统看法,其根源可以追溯到古希腊和罗马时代。经济分析始于资源的稀缺性这一现实。经济学基于这样一个事实,那就是:提供商品和服务以满足人类需要的物质资源相对人类需求来说是有限的。因此,生活总是关于物质问题的选择,这些问题包括生产什么,如何生产,生产多少及如何分配等。每个使用稀缺资源的行为都会有经济成本,称之为机会成本。机会成本反映的是在当前用途下稀缺资源使用成本,机会成本还可以按照放弃的或必须放弃的最佳替代物的价值来衡量。

经济术语中的电子商务

如果资源是相对不足的,什么方式才能尽可能有效地使用资源? 经济学假定完全竞争市场是最有效的资源使用者。竞争性市场能够对来自产品价格的信号、资源成本的信号及公司损益的信号做出反应,从而提出如何用尽可能最低的资源成本获得最可能大的价值的方案,这个方案虽然不完美但却是最好的。当经济学被用来分析电子商务现象时,市场、竞争、价格信号、效率这些重要的经济概念可以帮助识别和组织话题。首先,因特网提供了建立商品和服务交易的电子市场或虚拟市场的技术。其次,电子市场允许电子商务企业通过电子手段相互竞争,或者与实体市场上的实体企业进行竞争。第三,电子商务企业处理价格、成本、收益、亏损和实体企业是一样的。第四,电子市场的结构特征影响电子商务企业的竞争行为。最后,电子商务企业的商业计划和战略影响其生存和发展。

经济学和电子商务相结合的相关问题的调查表包括以下内容:

- 电子市场的结构是什么?
- 给定市场的电子公司数量和公司规模对于资源的利用是否有影响? 如果有影响,是如何影响的?
- 新企业遇到的进入和退出壁垒是什么? 这种壁垒是技术上还是战略上的?
- 电子商务企业是如何给它们的产品定价的?
- 电子商务企业是怎样差别化它们的产品,以及怎样为他们的产品增加足够的价值从而带来客户忠诚?
- 电子商务企业之间及电子商务企业与实体企业之间是怎样进行互动的?
- 电子商务企业是如何应对对手们的竞争性创新的?
- 电子商务企业是如何有效地控制成本和利用资源的?
- 电子商务企业能否获得利润?
- 电子商务企业是否有足够的盈利能力来回报冒着风险投资启动电子商务企业的投资者?
- 电子商务企业能否随时间成长,预见市场中差距或变化,并采纳新技术?

在寻找这些及其他关于电子商务和因特网经济学问题的答案时,记住两个限定语非常重要。首先,目标之一是鉴别和应用一整套分析电子商务活动的经济学原则。这些活动包

括在不同的电子商务行业及市场中运作的个人,以及众多的电子商务公司的行为。它可能是市场结构行为,以及 B2B 企业与 B2C 企业或产业彼此之间在一些重要方面的效率差异。甚至同样是 B2C,书籍销售模式的经济学问题在很多重要的方面都不同于销售汽车电子产品或旅游的模式。因此,获得的东西可能是一个经济学概念的工具箱,利用它我们可以判断和理解特定的电子商务公司或行业的运作,并预期他们的未来。

其次,经济学已经发展出一个分支理论叫微观经济学。这个分支研究的是个体的经济行为,包括企业和消费者是如何处理稀缺性问题的;就电子商务公司的行为而言,电子商务与其他类型的经济行为有怎样的不同? 尽管它可能引发商务方式的革命,但电子商务的竞争行为及分析电子商务行为的工具未必就是很特别的,有可能就是传统微观经济学的一部分。

总之,以因特网和 Web 技术为基础的电子商务正在改变着个体消费行为,以及企业商务活动的方式。它消除了交易过程中的时间和空间障碍,降低了消费者搜寻商品的成本,过滤信息收集过程,更利于买家。信息的易得性及空间的消弭同样也影响商家的权衡,即是通过产品差别化还是通过价格进行竞争。

因特网是通信革命漫长历史中的最新一步。然而,与改变市场的革命相比,电子商务则是一个小的革命,它更多的是一个扩展交易选择范围、增加分销渠道的革命力量。数据显示通过因特网进行的电子商务交易数量庞大并持续增长。因此,尽管许多最初的 dot-com 公司昙花一现,而其他生存下来的公司却开始盈利。因此,新的电子商务公司前仆后继就不足奇怪了。因特网和电子商务将生生不息。

经济分析工具及其严密性提供了一条有用的途径,借此我们可以研究电子商务和因特网的性质、行为和结果。竞争性市场标准、价格信号的形成及对价格信号的反应、战略行为、稀缺资源的有效利用等都是解释电子交易的非常有价值的经济概念。这些工具有助于人们全面地阐述,或许解答某些关于电子商务企业、电子市场和电子商务的关键性问题。

第 4 单元 课文 A:网络出版

人们认为网络为新闻的传播提供了一个新的渠道,克服了报纸、广播和电视的缺点。因为网络不仅可以像广播和电视那样提供实时的新闻,而且在网络中还可以找到在严肃报纸中才有的深入报道。不仅如此,还可以通过网络浏览器的设置来筛选读者感兴趣的内容,而排除其他内容。

网络出版是指报纸、杂志、新闻和其他信息在互联网中的电子传播。在大多数情况下,网络出版的内容是免费的,因此通常会链接广告,从而吸引人们去浏览广告网页。网络出版始于 20 世纪 60 年代,在当时用于提供在线文献及出售电脑数据库中所储存的知识。而公共拨款的网络出版最初是为了医学、教育和航天航空项目的研究。如今,网络出版有了许多不同的目的,涉及在世界范围内的信息传播及广告。一些新的互动技术及对互联网的其他应用也促进了网络出版的发展。

自 1995 年以来,就有一些组织在学习利用网络出版来获得竞争优势和市场份额。但是,并非所有的组织都是如此。那些不了解消费者行为的组织只是把网络出版当做一种商务工具。然而,一旦离开了合适且令人印象深刻的内容,即使高科技也不足以吸引、留住消

费者的注意力。商业组织最终意识到：关注消费者的需求和愿望是使网络出版成为商务工具的一个重要因素。

通过网络出版传播信息的一个最早的例子，就是在网上发表自己的学术著作以便让同行们进行评论。现在，网络出版主要用来传播信息和进行互动交易。杂志和报纸的出版商，像 AD Week、PC Magazine、华尔街日报和洛杉矶时报都是利用网络出版来传播信息的。将来，网络出版会包含更多为读者量身定做的资料，读者可以免费获得这些资料，有些也可能要付费。

网上有许多的网络报纸，大部分都是现有报纸的网页形式。华盛顿邮报是迄今为止获得赞许最多的报纸。一般的阅读(除了两个例外)都是免费的。

网络报纸似乎常被用来查找一些前期刊物中遗漏掉的内容，或者是被用来阅读招聘广告，而并非被当做报纸来阅读。网络杂志吸引了一些读者群，但却很难吸引人们去订阅。因为大家都认为网上的东西应该是免费的，而且担心杂志不像其在网络中所呈现得那么好，即便好也不会在订阅后维持下去。

然而，网络确实对传统的报纸产生了威胁。发行报纸所得到的大部分收入并不是来源于读者为购买报纸而支付的价格，而是来源于广告商们在报纸上做广告而支付的广告费。但是现在，网络也可以用来发布招聘、住房和二手车的广告，而且收取的广告费用远低于在报纸上做广告所需要的费用。一旦这些广告都转移到了网络中，那么我们很有可能就买不到——至少无法用我们所期望的价格买到——日报或当地报纸了。

网络出版的出版内容包括报纸、杂志、新闻、课本、音乐、文学著作、电视剧和电影。一些正在被使用的网络出版的方法包括：在线档案、新媒体、出版中介、动态和及时的出版。

在线档案是像图书馆书目和文献资料库那样的数字档案，基本上实现了纸质出版物的在线出版。那些视网络为创造新素材的媒体的出版商正在使用这些新媒体。对于任何话题，这种出版方式都增强了出版物的综合性，而这些都是传统杂志无法提供的。新媒体实现这一目的的途径，是利用自己超文本链接的能力，提供相关的故事、主题和绘图等。它很容易满足读者的需要。新的媒介方式也提供一些包括刚刚发生的新闻的最新材料。其中一个例子就是 Hotwired (www.hotwired.com) 网站，它是 Wired Magazine(《连线杂志》)的一个补充。

出版中介可以被当做搜寻信息服务的在线目录，是试图帮助人们在线寻找商品、服务和产品。网景公司提供的服务就是出版中介的例子。动态和及时的出版是网络出版的另一个方式。通过这种方法，内容可以被实时地创作出来，并用最适合用户地址、品位和偏好的形式传输。“动态”是因为它能够客户化网页的内容以满足用户的偏好。而“及时”是指能够使得 Java 应用程序和设计好的内容在用户需要时进入他们的电脑，一旦不需要这些程序和内容后，它们会自行失效。

网络出版的使用也已经进入了其他应用领域。其中就有如“教育娱乐”和“推式技术”这样的概念。教育娱乐集教育、娱乐和游戏于一体。其主要目的就是使学生们成为积极的而非消极的学习者。通过积极的学习，学生才能够更多地参与到学习当中，从而使学习经历更加丰富，而且使学到的知识更容易记忆。教育娱乐体现着寓教于乐的思想，帮助学生在不知不觉中学习。它覆盖多种科目，如数学、阅读、写作、历史和地理。教育娱乐游戏的目标人群范围包括从三岁到成年的不同年龄段的人，也用于内部网中的公司培训。Broader Bound Software 公司和 Software Tool 公司就是教育娱乐供应商的先例。

在网络出版的教育娱乐方面还有一些管理问题需要考虑。教育游戏大都通过光盘提供。不过,自 1998 年以来,越来越多的公司都开始在线提供远程学习形式的教育娱乐。

第 5 单元 课文 A:电子商务中的物流

1. 介绍

物流,是人、物和信息的转移或流动,是每一个公司企业策略的重要部分。这一术语源于军事,直到 20 世纪的后二十五年,商业组织(它的花费高达产品有效配制总成本的 30%)才开始认真研究物流这一课题。

物流就是要寻求一种最便宜的方式来实现某一水平的效用或者客户服务。它有五个关键要素:

- (1)效用——产品或服务;
- (2)可提供产品或服务的设施;
- (3)通信;
- (4)库存;
- (5)运输。

目前的挑战是通过权衡每一个要素来达到要求的效用。例如,许多女士的时尚只流行很短的季节。为了使供应商以最低的成本从全世界获得原材料,新产品投放市场通常有很长的前期准备时间。为了时尚的流行,可以通过海上集装箱降低运输成本,同时保证进销量。然而,时尚一旦流行起来,供应商就要尽快地知晓这一信息,找到并运送更多的货物到零售商店去。这些新加货物通常不使用最便宜的交通工具运输,否则就会到得太迟,又不能用最便宜的原料在较远的地方生产,除非使用诸如空运这种高成本的运输方式。供应商从销售信息系统得到反馈的速度决定了其满足市场需求的能力。

通常服务水平的可靠性和一致性要比速度更为重要。一旦承诺了就要履行。速度要视情况而定。A、B、C 三类物品名称在库存管理中已被使用多年。A 类物品必须随时都可获得,就像医院里必须要有氧气或汽车制造厂里必须要有发动机装配一样,其他的,如家里的灯泡,可被归为 B 类或 C 类物品。你可以从另一间借。同时,大多数顾客不会改变他们对车的选择是因为并不是立刻要用。然而,若是一块巧克力或饮料,他们就会选择其他牌子或者到别处去买。

2. 整合的物流信息系统(ILIS)

正如商品的流动,信息也必须是流动的。在正确的时间,正确的情况下,携正确的文件把信息送到正确的地点,这些有关“正确”的问题必须弄清楚。卡车司机应从哪里装运?谁会接收货物(包裹)?物品的库存是多少,将要生产多少?货运现在到哪了?信息贯穿整个物流管理系统中,但是,像商品一样,它必须要以一种有效的形式准时送到正确人的手里。信息可以简单到像刚刚运抵的包裹的内容,也可以复杂到像重型装备的新型供应链设计的建议。物流中信息系统的本质就是把准确的数据转换成有用的信息。错误的数据和匮乏的信息就会扰乱物流管理活动。当然,即使是有了精确的数据和丰富的信息,还必须有人付诸实际行动。

一个整合的物流信息系统可以被定义为:预测客户需求;获得满足那些需求所必需的资金、物资、人才、技术和信息;商品或服务网络进行优化以满足客户需求;以及利用网络及时地实现客户需求等一系列过程。它由内流物流管理、业务转换和外流物流管理组成。内流是产品到公司的流动。转移操作涉及工厂和(或)仓储设备内部的产品流动。外流是产品从工厂到顾客的流动。

顶级的物流效率和效果要求有一个很好的整合物流信息系统(ILIS)。没有随时能够取用的准确信息,整合的物流管理操作就会失去效率和效果。整合的物流便不能维持战略竞争力。ILIS 的优先应用领域包括管理库存状态,追踪货品和发货,取货和运输,订货便利化,订货准确化,内部物流和外部物流的协调,以及订单处理。通过 ILIS 信息流的质量是至关重要的。所谓的“垃圾进一垃圾出”可能出现在任何信息系统。在信息的质量上,有三点值得我们关注:(1)获得正确的信息,(2)保持信息的准确性,(3)有效地沟通信息。

定义整合的物流信息系统(ILIS) 一个整合的物流信息系统可以被定义为:通过人员、设备和一定流程,将所需信息加以收集、整理、分析、评估,然后将它们发给恰当的决策人以帮助他们做出高质量的物流决策。

ILIS 收集来自所有可能渠道的信息,以协助整合物流经理做出决策。它接触到市场、金融和制造业信息系统。所有这些信息都将被高层管理者用来制定战略决策。

ILIS 有四个主要的组成部分:订单处理系统,研究和情报系统,决策支持系统及报道和产出系统。上述四个子系统应该共同提供给整合物流经理及时准确决策参考的依据。这些子系统与整合物流管理功能和整合物流管理环境相连接。在开发信息之前,信息需求就必须确定下来。同样,一旦产生基于需求评估的信息,它将被送到整合物流经理那里。

订单处理系统无疑将是最重要的子系统。订单处理是一系列使正确的货物得以准备好并运送到客户(直到库房接货为止)的活动。订单处理包括检查客户信用,抵补销售代表的账户,确保产品的供应,并准备必要的船务文件。卖方应能控制订单周期活动。通过计算机的应用,订单处理的时间已经大大地缩短了。

研究和情报系统(RIS)不断地监控环境,观察并总结影响整合物流操作的事件。RIS 监控公司内部环境、外部环境和公司之间的环境。外部环境包括在公司之外发生的、通常不在公司控制下的事件。公司间环境包括一些直接影响公司,且公司有一定控制的外部环境要素,如分销渠道。公司内部环境包括公司的内部工作和被公司掌控的要素。

决策支持系统(DSS)以计算机为基础,运用分析建模来解决复杂的整合物流问题。所有 DSS 的核心是一个包罗万象的数据库,包含能使整合的物流经理做出决策的信息。

ILIS 最后的子系统是报告和输出系统。常规的报告用来制订计划、操作和控制整合的物流。计划产出包括销售趋势、经济预测和其他的市场信息。营运报告用于库存保管、运输调度、发送、购买和生产计划安排。控制报告用来分析费用,预算和业绩。

3. 电子数据交换(EDI)与整合物流

电子数据交换(EDI)是计算机之间直接的联编。EDI 广泛地被用于整合的物流信息系统中。EDI 可以提高数据的广度,及时性和质量。EDI 几乎适用于整合物流的每个方面,从无纸文件流程到用条形码扫描仪和无线电波标签进行储入仓库管理。EDI 的优势在于降低成本,提高生产力,缩短订货周期,对客户的更好关注,文书工作、纸张和邮资的减少。

为了实现这些优势,公司必须采取一些特定的规则:(1)贸易伙伴必须合作建立新的体制,改进交易流程;(2)主要公司人员一定领导 EDI 的落实工作;(3)公司必须投资实现 EDI 所需的时间;(4)公司必须遵守 EDI 标准。EDI 不是一个目标,而是作为实现竞争的优势,领导渠道分布,改善客户服务,获得高利润,与贸易伙伴建立更好的工作关系,更好地管理公司信息的一种手段。

EDI 的一个重要问题是语言的标准化。目前国际上有两个基本的标准,ANSI ASC X12 和 EDIFACT10。两者都是为全球的沟通而设计的,但是他们不一定相互兼容。联合国发展了 EDIFACT,然而美国却在使用 ANSI X12 标准。

第 6 单元 课文 A:电子数据交换(EDI)

电子数据交换(EDI)被众多组织用于以事先决定好的格式所发生的普通交易。EDI 通常被用在整个贸易的实施和结算阶段。在执行一个简单的贸易中,客户的订单可以用 EDI 发送,供应商的递送通知也可以是电子的。至于结算,供应商可以使用 EDI 来传发票,客户可以在银行通过对供应商的付款通知和使用电子转账完成最后的环节。这整个周期可能会更为复杂,并且涉及更多的电子信息。它可以反复多次循环,就像超市要买 cornflakes(脆玉米片),车辆装配者需要轮子的不断补给一样。

EDI 可用于售前,已经有一些 EDI 报文标准开发出来用于合同签订等,但它们并没有被广泛采用。寻找合适的贸易合伙,以及商谈贸易条件很有可能仍由采购部门的工作人员来做或者由经理在高尔夫球场上就可以完成。售前阶段也可能涉及电子市场。EDI 也可适用于售后,但仅当他们采用标准化的格式时,而且使用频率要高,这样采用 EDI 系统在经济上才是合算的;像经销商向被担保人索要付款这样的事情就可以应用 EDI。

EDI 也可用在那些标准化的、重复的但并不属于通常所定义的贸易活动中。比如:

- 在英国,许多国家医疗保健机构的牙科医生把牙科记录保存在计算机系统上,把治疗细节用 EDI 传送给牙科董事会。然后董事会根据它的治疗费用的比例支付给牙科医生,这也是一个电子化交易过程,是使用英国银行清算系统完成的。
- 英国电信也已经开始使用 EDI 来收缴天然气费、电费和取暖费。由 9,000 部电话机连接全国上下的计算机中心和办公室,一年大约可以处理 120,000 份来自各部门的账单。1996 年它开始一个项目,从来自苏格兰电力公司的 250 个账单开始把这些发票转为用 EDI 进行处理——如果手工处理的话,这 250 个发票需要两天的时间,若使用 EDI 可以大大节省工作量。

EDI 的这两个用处使得用电脑进行合作或交易的组织之间的数据传输更加容易,不会发生使用纸介质贸易时所发生的延时、不准确和效率低下的问题。

EDI 的定义

EDI 通常被归结为无纸贸易。更为正式地,EDI 被国际数据交换协会(IDEA)定义为:结构化数据通过电子方式,以认可的标准从一个计算机系统转到另一个计算机系统的转移。EDI 的这种定义有四个要素,每个要素对一个 EDI 系统都是必不可少的。

1. 结构化数据

EDI 贸易由密码、价值和(如果有需要的话)短篇的文本组成;每个要素都有一个严格界定的目的。举例来说,一个命令为客户、产品和价值设定密码,如预定的数量。

2. 统一的信息标准

EDI 贸易须有一个标准格式。这个标准不只是在贸易伙伴之间有效,而是要在全国和国际水平上都是有效的。采购单将会是被通过的信息标准之一。

3. 从一个计算机系统到另外一个计算机系统

EDI 信息发送是在可用的计算机之间进行的。并不要求人们读这些信息或者把它输入计算机系统中。例如,信息直接在客户的采购系统和供应商的订单处理系统间传送。

4. 使用电子手段

通常这是通过数据沟通的,但是磁带或磁盘的物理转移也属于 EDI 范围。通常会使用为 EDI 特地设计的专网。

EDI 的优势

EDI 可以为使用它的组织带来不少好处。它可以在商业交易中节省大量的时间,而且在节约成本方面大有潜力。

EDI 能用来以电子交易替代纸交易——这是 EDI 初装配时的正常路径。EDI 的全部优势只有当重新调整贸易实践以充分发挥 EDI 的潜能时,当 EDI 被用做转变企业经营方式的科技时——即时(JIT)生产和快速回应供给成为 EDI 被用来取得竞争优势的科技的两个主要体现——才能被人们所认识。

EDI 的直接优势包括:

1. 缩短订购时间

纸质订单需要打印、装信封、客户的收发室发送、邮递服务、供应商的收发室接收,以及输入到供应商的订单处理系统。纸介质的订购方式需要打印,并且由客户的邮递室通过邮政服务来发送,由供应商的邮递室接收并输入供应商的订单处理系统中。如果在三天之内能够可靠地实现这一过程就很不错了。EDI 订单直接送入网络,而唯一的延迟就是看供应商多长时间从系统中检索信息。订单可以在一天内进入供应商的系统,如果有紧急信息,则可以更频繁地被检索,比如每个小时检索一次。

2. 削减成本

使用 EDI 可以削减成本。这包括信笺的费用和邮资,但是这些或许会完全与运营 EDI 系统的费用相抵消。使用 EDI 主要的节约是在它节省人力成本的潜能方面。一个很明显的例子是,如果订单直接输入系统则不需要订单输入人员。再者,季节性高峰期、员工节假日等不再造成在订单输入区的积压。节约成本需要用来充抵建立系统和网络的成本。

3. 消除错误

将任何信息输入计算机系统都可能发生错误,把纸介质的订单输入订单处理系统也不例外。EDI 可以消除这些错误。很危险的事情是,如果没有一个订单输入人员可以发现客户的错误,客户将无法得到所有他所要求的。

4. 快速反馈

使用纸介质的订单,如果有供应困难,如产品脱销,客户需要几天的时间才能得知消息。而使用 EDI 则可以直接通知客户,这样就有时间预定调换产品或换一家供应商。

5. 精确地开发票

就像订单一样,发票也可以用电子的方式发送。EDI 发票有着和 EDI 订单一样的优势,它可以节省时间和避免出错。但是,EDI 发票的主要优势是它可以自动与原始订单命令相匹配,清算付款时不会引起像核对纸质发票所发生的那种质询。

6. EDI 付款

付款也可以用 EDI 来完成。EDI 支付系统也生成 EDI 付款意见,可以以电子的方式与有关发票相匹配,亦可避免疑问和延迟。

使用 EDI 的间接好处包括减少库存量,改善现金流量,开发商机和锁定客户。

为了获得 EDI 的这些优势,就必须把它视为一种投资——首先是投资,回收是长期的。投资的成本包括 EDI 系统的建立(硬件、软件和网络设施),以及与贸易伙伴达成协议的时间。

第 7 单元 课文 A:网络营销结构概述

1. 亚马逊的竞争结构

网上图书销售的竞争越来越激烈了,每个公司都在市场中寻找自己的定位(如旧书、科技书籍、儿童读物及价格比较)。全球网上图书市场有望在 2000 年增长至 11 亿美元。我们可以通过比较亚马逊与其竞争对手的优劣势,探讨网上图书市场的竞争结构。为此,Barnes & Noble 公司被选为一个主要的竞争对手。

亚马逊是全球最大的网上书店,占有世界上 50% 的网上图书市场份额。亚马逊在 1995 年 7 月开通,在 1996 年,它的售量为 1570 万美元。到 1998 年,随着每月(而非年度)34% 的惊人增长率,其销售额攀升至 600 亿美元。尽管事实上在自己的仓库里只有几千畅销书,但是亚马逊在 2000 年春季的电子目录中,却列出超过 10 万套的书名。其他订购单被转递到批发商 Ingram 公司和联邦快递公司,由他们将商品发送给顾客。1996 年,亚马逊的年周转率是自己库存的 42 倍,而实体商店 Barnes & Noble 公司年周转率是自己库存的 2.1 倍。据我们在 1998 年夏季进行的调查,无论 Amazon. com 还是 Barnesandnoble. com,他们出售的图书大约比传统书店便宜 14.2%。尽管亚马逊在 1997 年亏损了 2700 万美元,它的股票价格却已经大幅度上升,到 1999 年 1 月,高达每股 200 元。

亚马逊有 23 种图书类别,点击“浏览书目的主题”就会发现这些种类。为了协助寻找图书,亚马逊不仅提供主题指南的服务,也提供关键字搜索引擎服务。这种服务就像大多数网上购物中心的服务一样。此外,在“本周热卖区”,亚马逊也提供畅销书籍、情景售卖的相关书籍,以及许多书评方面的信息。在美国,亚马逊在约 3 至 7 个工作日内交货,在海外需要 4 至 10 个星期。客户要支付船舶运输费,对于标准的美国国内邮递,收费为每一发货单位 3 美元,外加每本书 0.95 美元。在网上书店获得好评之后,亚马逊将业务扩展到音乐、录像、礼品和拍卖。

最大的连锁零售书店 Barnes & Noble(www.barnesandnoble.com) 于 1997 年联合搜索引擎 LYCOS 开始在网上进行反击,并且它很快达到 15% 的网上图书市场份额。Barnes & Noble 的优势是他的 36% 的高利润率(亚马逊的利润空间只有 22%)。并同亚马逊的亏损形成对比,Barnes & Noble 在 1997 年有 5,100 万的利润(传统商店和网上书店的收入之和)。最近,Barnesandnoble.com 又建立了一个面向企业的网上市场(批发市场)。Barnes & Noble 公司也收购了 Ingram 公司。

在这种情况下,与管理相关的话题是谁是最终最具竞争力的? 是亚马逊和 Ingram 公司的合作模式更有效? 还是网上图书零售渠道 Barnesandnoble.com 与传统的全国书店系统的结合更有效? 亚马逊和 Barnes & Noble 的新竞争对手是 bestbookbuys.com,它能比较包括亚马逊和 Barnes & Noble 在内的 18 个互相竞争的电子书店的价格,并以最低价格出售书籍。赢得市场的关键因素是什么?

2. 电子营销结构概述

亚马逊的案例显示了电子零售的竞争结构。我们可以从各种角度理解电子市场的竞争结构。电子营销可分为消费者导向的(B2C)和企业导向的(B2B)电子市场。虽然消费者导向的电子市场仍处于实验阶段,但它在离线市场的发展却很快,主要使用智能卡。消费者导向和企业导向的电子营销有许多共同的特点。比如,网络书店亚马逊不仅可以被个人消费者使用,而且也可以被企业的采购部门使用。比如,亚马逊的主要竞争对手 Barnes & Noble 就开辟了专门的业务部,专门为企业客户服务。沃尔玛在线不仅向个人客户销售,也向企业客户销售(通过其萨姆俱乐部)。戴尔既向消费者销售也向公司销售计算机。在以卖家为中心的电子购物中心的架构下,商家在面对个人消费者与公司客户时,没有多大的差别。

然而,对于高交易量和大量的现金支付,企业购买确实需要更精确的记录、可追踪性、可说明性及正式合同。

通过因特网,厂商可以不利用中介,直接接触客户。只要制造商销售的是已经确立的品牌而且他们的主页已经有了很好的知名度,制造商的直销就可以实现,戴尔电脑就是这样。

如果一个制造商的网站知名度不高,仅仅开办一个主页,被动地等待顾客点击,这个也许对销售贡献不大。因此,公司有必要大张旗鼓地宣传他们的网站地址。任何经济上划算的广告都可以被用来实现这一目的。其中一个例子是,把自己的网站链接到知名的电子目录网站,而且大多数厂商都使用中介机构的目录服务。这些中介网站被称为电子购物中心(即电子摩尔)。我们可以看到有两个类型的电子购物中心或电子摩尔:电子分销商和电子经纪商。如果电子摩尔负责订单履行,那么它就是电子分销商,例如亚马逊和 JCPenney Online。相比之下,电子经纪仅仅协助搜索过程——如 Choice Mall。实际的订购则转交给了厂商或分销商。

像百货公司和折扣店这样的既有经销商至少在电子商务的初级阶段不会在电子零售中扮演主要角色。尽管大的经销商如沃尔玛和 JCPenney 也利用因特网接受订货,但传统的分销商主要利用他们的主页和电子网页目录来吸引顾客去实体商店购物。因此,我们需要研究电子经销商、经纪商和网上百货商店的竞争结构。

起初,电子营销主要关心的是安全技术,这些技术对于基于网络的营销是必要的。然而,在今天,管理的重点正转移到如何利用网络营销的机会和现有销售渠道一起来提升竞争力。所以我们要从概念上考察新的电子商务模式的应用。

第 8 单元 课文 A:信息技术与供应链管理

在供应链管理方面,许多全球性的制造公司都参与实施了新的信息系统和技术。财务系统、生产规划、物流及库存管理系统是最早的应用领域。大多数公司需要 4 至 5 年的时间,并花费数百万美元的直接成本支出。当问到这些项目的影响时,经理们通常说他们的公司将获得更快的客户反应,成本效益更好,也更好地在各职能部门之间共享一致和准确的信息。虽然从长期看,投资 IS 和 IT 的观点听起来是合理的,管理者还是要问这些方法是否合适。

大部分公司都开始面对“超竞争”,在这种竞争中,公司把自己定位在一个彼此越来越争斗的位置。而不是在适度竞争中彼此包容相伴的位置。在适度竞争中,壁垒是用来限制新进入者的,并且,只要产业领导者一起合作约束竞争行为,那么可持续的优势是可能的。但是,处于超竞争状态中的公司(超竞争状态下的客户忠诚度不断地受到挑战,组织必须变革自己的能力和过程以适应或超越竞争者的挑战)必须不断寻机破坏产业领导者的竞争优势,并创造新的机遇。

在超竞争的市场,追求 4 至 5 年的再造应用软件项目和数据库项目是成问题的,因为公司每隔 6~12 个月的时间,就得改变自己的战略能力;短期改变是获得盈利及增长的新的基础。过程中的模块化和柔性化的出现、信息管理和应用系统等,不仅使快速和柔性实施成为可能,而且使企业“放弃”或“忘掉”那些不再带来竞争潜力的方法。

适度竞争市场与超竞争市场中的供应链管理项目的运作重点是有争议的。在前者中,上游项目的投资(新财务系统、生产计划或库存管理系统)可能带来大量的好处,其中包括持续的信息共享和跨部门合作的改进。而在超竞争条件下,运作的重点则是有高投资回报和高客户附加价值的过程和信息系统。运作的重心将转向需求侧,并且强调客户互动、账户管理、售后服务及订单处理。为了维持超竞争市场中的竞争优势,公司可能会寻求取消详细管理报告和控制,以及市场预测和生产计划。取而代之,公司可能从他的经销商及零售商那里获得实时、在线的产品流向信息。公司也可以通过派遣组织或者授权员工的形式,不断地改进过程来实现控制和管理报告的简化。

除了选择正确的过程和信息流的自动化,管理者还必须考虑到这些自动化方法的影响。适度竞争情况下的与信息、IS 和 IT 相关的取舍和选择不同于超竞争情况下的上述问题。在适度竞争的情况下,重点通常是在不同的职能中实现统一的数据定义、消除不必要的纸张处理费用,以及无效的软件应用和劳动力。供应链管理改进的目的是为了供应链关系更快捷和更一致,并且往往把库存作为最后的缓冲区而不是解决问题的第一招来降低周转

金成本。在高度竞争中,重点是创造价值,价值的创造主要办法是提高信息的使用和客户数据的质量,改善售后服务及订单履行,而为上游过程定义更一致的信息则是次要办法。

20 世纪 90 年代,和供应链管理相关的软件应用变化非常之快。这种变化发生在两个层次。首先,在过去 10 年中,为制造公司提供软件包已演变为一个主要的市场增长点。公司现在能提供应用在主机上或更多分布式平台上的软件包,如 AS400。另外,新的公司已经有显著的增长,这些公司是在使用 UNIX 操作系统的客户机/服务器平台上提供软件包的公司。其次,在 20 世纪 90 年代的大多数时间,以及基于主机的计算主宰的早期几十年中,软件应用的主导模式是基于“瀑布”式的;在这种方式中,首先确定客户需求,接着花 4 至 5 年多的时间开发应用软件,这是一个复杂的线性过程。这些项目的失败率高达 80% 甚至以上。

不过,在过去的五年里,这一模式已开始受到一些公司的挑战,这些公司要么能提供在低成本平台上运行的、更合适的软件,以及/或者其专业特长就是在固定的费用、固定的时间基础上,提供快速应用软件实施的公司。后面说的公司往往强调供应链方面的客户价值,并且在 6~12 个月里,集中力量实施系统。他们还试图分担时间风险和客户的超支成本。显然,对于制造公司而言,还有其他有意义的替代方案。在超竞争的市场中,快速、高质和低成本的信息系统是竞争的需要,总经理们已不再容忍与其竞争目标不一致的供应链中的应用软件变化。

大多数的制造业公司正试图举债的方式,同时运营他们的全球、地区和地方的供应链。这样做,公司可以享受到统一的计算机平台,以及操作系统所带来的成本降低和价值创造的好处,而且在必要的时候,还可以为地区内容定制应用软件包。在这些公司转而采用客户/服务器技术、更强大的声音、数据和视频网络的同时,他们也建立起信息技术基础设施标准。这样,在地区的和当地的供应链快速实施应用软件的同时,他们已经开始追求基础设施全球化,降低成本在销售额中的百分比。

许多领先的公司投入数百万美元到 IT 和 IS 项目上,这些项目的效益将在 4~5 里获得。在欧洲,不止一个大型制造业公司投资 2~3 亿美元到整合供应链管理项目上。20 世纪在 90 年代后期的超竞争市场条件下,这些项目的实施风险很高,商业回报率很低。在未来 2~4 年的超竞争市场中,快速、灵活和模块化的软件系统和数据库将使制造公司出现分化。那些以错误的竞争假设实施 IS、IT 项目的公司可能会发现他们的做法成为了竞争劣势。就在他们的竞争对手对其供应链的核心业务流程和信息流进行快速、集中和不断的改进给客户创造价值的时候,他们的公司却创造了重大的商业风险。

第 9 单元 课文 A: 网络广告方法

做广告就是为了影响买卖双方的交易而进行的信息传播的努力。在传统意义上说,广告是非特指某人的、由广告者支付费用的单向大众传播或大众营销。为使其更有效,电话营销和直接邮寄通常被采用从而使营销有针对性。这些直接营销的方法虽然效果非常好,但成本却昂贵。因特网重新定义了广告的含义。因特网使得消费者能直接与广告商及广告互动。在互动营销中,消费者可以点击他或她的鼠标来得到更多的广告资料,或发送电子邮件问题。因特网为广告商提供了双向通信和电子邮件的能力,同时使得广告商把广告费花到他们想针对的特定群体身上,这比传统电话营销更准确。最终因特网实现了真正的一对一广告。

1. 一些用于广告的主要方法

1) 旗帜: 旗帜广告是因特网上做广告最常用的形式。正如你畅游在信息高速公路上, 旗帜广告到处都是。图像的文件大小应该是大概 7KB 到 10KB。文件越小, 加载越快。因为较长的下载时间可能使得浏览者变得没有耐心, 或在旗帜广告全部出现之前转移注意力, 所以, 旗帜广告的设计者在图像大小上付出很多心力。通常, 旗帜广告包括一篇简短的文字或所推销的产品的图形信息。广告商尽量设计出能吸引消费者注意力的旗帜广告。随着因特网编程的进步, 我们现在开始看到有视频和音频剪辑的旗帜广告。旗帜广告有一些链接, 当点击这些链接时, 客户就会看到广告商主页。有两种旗帜广告: 关键字旗帜广告和随机旗帜广告。当一个预先确定的词在搜寻引擎中被查询时, 关键字旗帜广告就会出现。对于想缩小目标观众范围的公司而言, 这是非常有效的。随机旗帜广告随机出现。想推出自己的新产品的公司要使用随机旗帜广告。

利用旗帜广告的一个主要优势是能够为目标观众而定制。人们可以决定着重针对那个细分的市场。旗帜广告甚至可以定制成一对一的目标广告。“强迫广告”营销策略也被运用, 强迫广告就是强迫观众要看的广告。其缺点是整体成本很高。一家公司要获得营销活动的成功, 它需要把广告预算中的很大一部分安排来实现大量的每千人成本。

在别人的网站上放置旗帜广告, 有几种不同的放置形式。最常见的形式是: 交互旗帜广告、交换旗帜广告和付费广告。交互旗帜广告指 A 公司同意展示 B 公司的旗帜广告, 同时, B 公司展示 A 公司的广告。它是一个在网站之间的直接链接。这可能是建立和维持旗帜广告的最便宜的形式, 但它却难以安排。交互旗帜广告常常不能实现, 因为双方寻找匹配很难。不过, 如果有几家公司参与, 多公司的匹配可能会更容易些。交换旗帜广告的组织安排有三个或更多合作伙伴参加交易。付费广告则是在因特网上购买旗帜广告空间, 类似于在其他媒体上购买广告空间。

2) 弹出窗口: 弹出窗口就是初始的网站网页, 用来在短时间内捕捉用户的注意力, 作为一种促销或向网站主页的引导, 或者告诉用户需要什么样的浏览器及其他软件来浏览网页。弹出窗口胜过其他任何广告方法的主要优点是可以创造新颖的多媒体效果, 或者为一次访问提供足够多的资料传递。

3) 场地租赁: 搜索引擎往往在其首页提供空间(场)做商业租赁。租期取决于网站主人和承租人的合同协议。不像在不同的时段出现的旗帜广告, 场地中的广告位置一直都不变; 这样, 减少了竞争。场地租赁的劣势是广告往往小而受限制, 致使有些浏览者错过了广告。同时, 成本也很高。

4) URL(统一资源定位): 应用统一资源定位作为广告工具的最大好处就是它的免费性, 任何人都可以把他的 URL 提交给搜索引擎并加入列表中。因为关键词的作用, URL 的应用还可以锁定目标观众, 同时将那些不想要的观众过滤出去。另一方面, URL 方法也有一些缺点。首先, 由于激烈的竞争, 公司在搜索引擎的首位排列很容易被其他公司取代, 另外, 不同的搜索引擎对列表的引用是不同的。

5) 电子邮件: 另一种在网上做广告的方法是购买电子邮件地址, 并把该公司的资料寄给在名单上的这些公司, 就像 CD—Max 案件所示的那样。这种做法的优点是低成本和联系多元化目标听众。大多数公司建立了他们发送电子邮件的客户数据库。在众多的电子邮

件发送服务公司中,有一个值得注意,即利用增强电子邮件的 www.spamet.com。

电子邮件作为一种营销渠道正在兴起,它提供成本有效的实施方式和高于其他广告渠道的更好、更快的反应率。一个电子邮件地址列表可以是一个非常强大的工具,因为针对的是你有所了解的一群人。要创建自己的邮件列表,请咨询 www.onelist.com(服务免费),或 www.revnet.com。

6) 聊天室:电子聊天室是指一种实时与参加者交流信息的安排。软件业估计,数十万的网站有百万计的聊天室。卖主常出资赞助聊天室。通过让聊天软件供应商在他们的网站管理你的聊天讨论,聊天功能可以免费附加给你的商务网站。你要做的仅仅是把聊天室链接在你的网站,聊天室软件的卖主负责其余的全部事情,包括为某一个议题的讨论而支付的广告费。

聊天室也被用来作为在公司与客户间的一对一联系。举例来说,Mattel 公司把三分之一左右的芭比娃娃销售给了收藏者。这些收藏者频繁利用聊天室,有可能注意 Mattel 公司或其他公司的广告。

2. 为什么在因特网上做广告

公司在因特网上做广告有好几个原因。首先,电视观众正在移向因特网。媒体紧追其后,宣称任何广告商的目标是为了实际而快速地接触目标受众。广告商认识到他们必须调整其销售计划,以适应越来越多的人减少利用其他媒体的时间,越来越多地把时间花在上网上这种新情况。

在 1996 年秋季进行的研究中发现,四分之三电脑用户都愿意放弃花在看电视上的时间,而花更多时间在电脑前。从看电视转移为电脑用户的人看来十分壮观。另外还有个事实就是:因特网用户受过良好教育并拥有高收入。于是,网上冲浪者是广告商所期望的目标这一结论就是唯一合乎逻辑的结论。

网络广告高速增长的其他原因:

- 广告可以最少的成本时时更新;因此,他们总是及时的。
- 广告可以送达全球范围内的非常多的潜在买主。
- 有时,在线广告相比于电视、报纸或广播电台而言更便宜。后者更贵,因为后者的费用取决于他们所占空间、展示的天(次)数,以及登载在多少国家和地方的电视台和报纸上。
- 网上广告可以有效地将文字、声音、图像和动画结合起来使用。
- 因特网本身的发展十分迅速。
- 网上广告可以互动,并针对特定兴趣的人群和/或个人。

这些特性开始说服大型消费品公司把越来越多的花费在传统媒体上的费用转移到网络广告上来。

第 10 单元 课文 A:电子商务网络安全

电子商务网络安全受到来自各方面的威胁。由于来自因特网及黑客截取、滥用、篡改信息内容的威胁,安全漏洞被频繁地讨论。其实,因特网只是不安全性的潜在来源之一,除此之外,电子商务网络安全问题还有如下一些其他的来源。

客户方:在使用或未使用客户设备的情况下,他人可以冒充客户方。使用盗取的信用卡详细资料就是最简单的例子。

卖方:卖方可以进行不当或不诚实的交易。这类问题包括卖方文档中的客户详细资料被盗取,以及设立网上商店却不提供所广告的商品或服务来骗钱的虚假交易者。

电子商务安全问题(网络整体的及通信两端的)可以分为许多种。Henning 认为安全电子商务需要四大支柱,也可称为安全四要素。

1. 私密性:当通过电子手段传输信息时,发送者和接收者都希望所传输的信息仍然是保密的,也就是没有被任何第三者看到。因此除了指定的接收者之外,传输的信息必须是无法解读的,这样才能赋予电子信息的私密性。对电子商务而言,在传输过程中保持口令详细内容和信用卡信息的私密性是主要的安全问题。此外,共享设计规格说明书的交易伙伴也希望确保信息的私密性,所以私有的设计规格说明书只能被发送者和指定的信息接收者看到。伪装信息最有效的技术就是加密技术。

2. 身份真实性:在系统或用户收到一条电子信息时,发送者的身份必需能够得到验证,以确保发送者身份的可靠性。一般而言,要验证一个用户,以下各种信息至少需要一种:你所拥有的东西(如一种记号)、你所知道的东西(如个人身份证号码)或者你是什么(如指纹或签名)。

三因素鉴别法会涉及以上三种类型信息所使用的技术,而两因素鉴别法只涉及这三种信息中的两种技术。一因素鉴别法使用一种信息来识别身份,因此也是最容易被攻破的。电子鉴别法是设计用来探测是否有人想冒充其他人。在有些情况下,受信任的第三方提供的服务是担保或鉴别用户。普通的鉴别方法是数字签名,一次性口令、智能卡、标记及生物识别法。

3. 完整性:如果信息没有被以任何方式有意或无意地改变,我们就说它保持完整性。对电子商务而言,鉴别购买者发送的订单详情没有被改变是一个主要的安全问题。在电子交易过程中,交易伙伴双方通过电子手段共享的设计规格说明书需要确保没有被以任何方式改变,无论是客户发给供应者的,还是供应者发给客户的。一种确保信息完整性的有效加密方法是使用散列法,对信息进行散列计算就是通过计算机对信息内容进行的一种运算。

4. 不可抵赖性:在涉及应还债务时,因为有人拒绝承认债务的存在,术语“抵赖”(否认)就意味着拒绝接受享受的权利和应承担的义务。对电子交易而言,任何一方对交易的单边否认都是令人不可接受的,并有可能导致诉讼案件。设计优良的电子商务系统会提供防止抵赖的方法,也就是提供不可反驳的原始证据、收据和电子信息的内容。从事电子商务的企业常易遭受不可抵赖危险的攻击。

解决这些问题的方法之一就是加密;加密就是把数据转换成一种密码形式,那么未授权用户就不能看到信息内容了。数据由发送者进行加密,由接收者进行解密。因为只有发送者和接收者知道加密和解密的法则,所以即使加密的信息(密文)落入其他入手中,他们也不能知道信息的内容。这正是加密方法被使用的原因。加密技术可以追溯到古希腊,而今天的加密系统是依靠复杂的数学公式和计算机运算的。不论复杂程度的高低,所有加密技术都有如下四个基本要素。

- 明文:可以识别的原文信息。
- 密文:明文被加密成不可识别的形式。

- 加密算法:即用来把明文加密成密文的数学法则,或把密文解密成明文的数学法则。
- 密钥:密钥是用来对信息进行加解密的。即使使用相同的加密算法,不同的密钥也会产生不同的密文。

密码技术不仅能对文本文件进行加密,而且还能对二进制文件——视频、声音及可执行软件模块——进行加密,确保它们在网络中的安全传输。

不同的运算法则都可以用来对信息进行加密。即使加密算法对外公布了,只要密钥不为人知,加密的信息就仍然是安全的。简单地通过计算机尝试所有可能的密钥,直至信息被解密是有可能的,这就是为什么密钥长度仍旧是确保信息安全的主要因素。

在历史上,许多加密算法是对称的,也就是用相同的密钥来进行加解密信息。这就意味着发送者和接收者必须事先商定一个密钥。对称密钥加密算法也叫做私有密钥加密算法。

对称密钥加密算法有很多种类,其中 DBS 算法是一种使用最为广泛的对称加密算法,它是美国国家标准和技术研究所(NIST)发布的,用于未保密的政府文件。由于 DBS 算法易受到强力的攻击,所以在它依旧在使用的时候就有其他的加密算法被发明出来,例如 RC2、RC4 和 RC5 就是一系列由美国 RSA 数据安全实验室研制的加密算法,它们的密钥长达 2048 位。

对称密钥或私有密钥加密算法的一个难题是:网络信息在从未遇见过的人们之间或是人机之间进行的传递;另一个难题是许多人都可以接触到 web 服务器。如果一个 web 服务器的私钥分布于成千上万的用户手中,那么这一密钥要长久保密是不可能的。基于以上原因,Whitefield Diffie 和 Martin Henllman 在 1976 年发明了一种新的加密算法——公开密钥加密算法。

公开密钥加密算法,也叫做非对称加密算法,使用了一对密钥——一个是公开密钥(公钥),另一个是私有密钥(私钥)。公钥可以让任何想要给私钥持有者发送信息的人得到,对密文进行解密的唯一方法就是拥有私钥。这样的话,发送信息就不需要双方事先商定密钥了。

与只有几种加密算法的对称加密算法不同的是,公开密钥加密算法有许多算法,RSA 就是其中之一。RSA 算法使用长达 512 位到 1024 位的密钥,是最广泛用于加密网络和电子邮件信息的算法。公开密钥加密算法的主要问题是它的运算速度,由于对称加密算法使用较短的密钥,本质上它要快于公开密钥加密算法。

这也正是为什么在现实世界中对称和非对称加密算法被结合使用,也就是数字信封。数字信封的基本原理是:用公开密钥建立对称密钥并对其进行加密,然后发送给信息接收者;对称密钥再被用来对信息进行加解密。

电子商务网络安全的另一个解决方法是散列法。散列法是用来验证信息内容没有被以任何方式改变过,完整性检验和散列值(哈希值)检验是常用的方法。散列函数是一种单向函数,也就是说散列函数的逆运算是不可能的,或者说是从散列值推出信息内容是不可能的。由于散列值并没有透露任何与信息相关的内容,因而不需要对他加密。计算散列值的算法也不需要保密。一般在发送信息时,散列值是被单独发送的。对于收到的信息,接收者使用与前面一样的散列法运算法则对它进行散列计算。比较两个散列值(接收到的和计算出来的),如果相同就表明接收到的信息和发送的是相同的。用户需要注意的是:散列法可以和加密算法结合使用来增加安全性,但是它本身并不是一种加密算法。尽管还有一些其

他的算法,如信息摘要 5 系(MD—5),但安全散列运算法 1 系(SHA—1)是唯一得到 ISO 认证的标准散列运算法则。

第 11 单元 课文 A:电子商务的法律问题

1. 法律问题的分类

由于电子商务是一门新兴学科,电子商务存在发展所必需的法律、伦理道德及其他公共政策等方面的问题正在日趋完善之中,所以许多法律漏洞只有在相关事件发生后才能被填补上。然而,这些问题对成功地实施电子商务是尤其重要的,因为它们包含着支持电子商务应用的(四大)主要支柱之一。事实上,大多数试图找出电子商务发展抑制因素的调查都一直把法律和相关的公共政策问题放在首位。例如,根据乔治亚理工大学 1997 年和 1998 年的调查显示,因特网面临的最重要的问题(按重要程度的降序排列)有:审查制度、隐私问题、导航性、税收和加密技术。

这些法律问题可以按几种方法进行分类,我们把和电子商务相关的法律问题分为以下几种。

隐私问题:这一问题对消费者来说是最为重要的。其实,在如今大多数与电子商务相关的大网站上都可以见到隐私声明。由于法律的定义和伦理道德之间的界限并不是很清晰(这一点我们将在后面提到),要与 1974 年颁布的《保密法》及其外延保持一致并不是一件简单的事。

知识产权:由于复制和散播数字信息非常容易且成本低廉,保护网络知识产权就极为困难。此外,监视谁在使用这些知识产权和如何使用也是非常困难的。著作权、商标和其他的知识产权问题是由联邦立法界定的。

言论自由权:网络提供了历史上从未有过的言论自由的机会,但是,这种自由或许会侵犯一些人的权利,以及与反猥亵法(Indecency Act)发生冲突。并且,非法和不道德的界限也并不是始终是清晰的。

税收:现在,对网上交易征收新的销售税是非法的(至少在 2001 年 10 月以前)。联邦立法和州立法之间可能会有冲突,不同国家间的税法也可能发生冲突。

消费者保护:如今有许多法律可以用来处理与电子交易相关的消费者保护问题,从误传到各种各样的诈骗。

其他法律问题:有如下几种电子商务在其他方面的法律问题,包括契约效力、交易权限、加密技术政策和网络赌博等。

法律问题与伦理道德的比较:理论上,法律问题和道德问题是可以区分的。如果你所做的是非法的,那么你就违反了法律;如果你所做的是不道德的,那么你可能并没有违反法律。显然,许多非法行为也是不道德的。问题是在 IT 界中,什么是非法的并不总是清晰的,而且道德话题也可能容易引起争议。

2. 电子商务的法律环境

网上进行的交易必须与其他交易一样遵守相同的法律法规。否则,就会面临和其他任何交易相同的惩罚——罚款、赔偿、法庭判定的解散,甚至是管理人员和所有者的被判入狱。

由于网上交易要遵守相关法律,这就使得它面临着两个越来越复杂的因素。首先,网络使企业延伸到了传统边界之外。使用了网络的交易马上就变成了国际交易,因此,这样的企业就比基于具体地理位置的传统实体企业要更快地遵守更多的法律。其次,网络提高了商业通信的速度和效率。与传统商家相比,客户通常与网络商家有着更为频繁的互动和复杂的关系。此外,因特网在与彼此之间经常有着高水平互动的客户间建立了一张关系网络。一旦网络交易违反了法律或者道德准则就会面临来自许多客户的迅速而强烈的反应,并且其他的交易者也会留意这一交易活动。

这些因素就引起了边界和权限问题,现实世界中的领土边界在传统商业中起着很好的作用,因为领土边界和法律边界常常总是一致的。政府对一个人或企业的控制能力就叫做权限。在网络中定义、确立并声明一种权限要比在现实世界中困难得多,这主要是因为传统的地理边界不存在了。例如,一家从事电子商务的瑞典企业可能拥有一个完全位于英国的网站,并且统一资源定位器是以“.COM"结尾,因此这并不能向消费者显示这是一家瑞典公司;承载着这家公司网页的主机服务器可能在加拿大,而维护网站的人却有可能远在他们澳大利亚的家中工作。

如果一个墨西哥人在网上从瑞典一家公司购买了一件产品,但对所收到的商品并不满意,这个人也许想起诉这家销售公司。然而,现实世界中以物理边界为基础的法律和权限体系并不能帮助这位墨西哥人决定在哪儿进行起诉。在物理世界中,国际边界有着明显的界限,但因特网并没有提供任何类似的东西。因此,在物理世界中起着很好作用的四个因素——权力、影响力、正当性及通知——并不能很好地应用到电子商务虚拟世界中来。

权限问题复杂而且变化迅速,任何想进行电子商务的企业都应该向精于这一方面程序性问题的律师进行咨询。

3. 网络犯罪、恐怖主义和战争

因特网为人们能更好地交流和了解提供了许多可能性——无论他们在这个世界的什么地方;因特网也为企业进入新的市场和创造经济增长机会敞开了大门。但是,据说有些人认为因特网是犯罪、进行恐怖主义,甚至是发动战争的有用工具。

网络犯罪包括在现实世界已经存在很久的犯罪的网络版,如盗窃、跟踪、散播色情内容和赌博。其他犯罪,如利用一台计算机向另一台计算机发动攻击,是网络所特有的。执法部门在打击各类网络犯罪方面面临着困难。他们面临的第一个障碍就是权限问题,由于权限问题,打击散播色情内容并不容易。在很多情况下,合法的成人内容和非法的色情内容的界限是主观的,并且常常难以区别。

在网络赌博中也有相似的权限问题。许多赌博网站位于美国之外,如果加利福尼亚的人们利用计算机联网去离案站点赌博,那么赌博活动在什么地方进行就无法弄清楚了。

执法部门面临的另一个难题是,在网络犯罪行为变得普遍之前颁布的法律很难被当地运用。

网上战争和恐怖主义也是两个重要的法律问题。许多网络安全专家认为,我们正处在新一代恐怖主义和战争的前期阶段,它们有可能通过网络爆发或者是通过网络的协调而进行。大量公开支持仇恨群体或恐怖组织的网站或者直接由他们操纵的网站普遍存在。

因特网提供了一个有效的通信网络,借助这一网络很多人和企业变得更加相互依赖。

尽管因特网起初设计是为了即使处于被攻击状态也能继续工作,但是,在一个经费供给良好的恐怖组织或流氓政府的持续攻击下,主要事务处理中心的运行速度也会缓慢下来。随着越来越多的商业通信转移到因特网上来,由这种攻击导致的潜在危害会增加。

第 12 单元 课文 A: 网络营销策略

越来越多的公司将其客户分成不同的客户群,并为每个客户群提供不同的针对性的信息。在有些情况下,当公司采用网络时,这些目标群体的规模可能更小,有时候甚至可能一个客户就是一个目标群。网站访客行为的最新研究甚至表明,网站可以采取一些方法来响应不同时间、有不同需求的访问者。

绝大多数的公司使用术语“营销组合”来描述他们用以实现其销售、促进其产品和服务目标的元素的组合。当一家公司决定使用某些元素的时候,便把那个特定的营销组合称为自己的营销战略。即使那些在同一行业的公司,他们都努力地在市场中表现出与众不同。公司的营销策略是一个可以通过网络作业来实现公司与其客户(包括现有客户和潜在客户)双方实现信息交流的重要工具。

大多数的营销课程把营销的基本问题归纳成 4P,即产品、价格、场所和促销。产品是一家公司正在出售的实际的项目或服务,其本质特性很重要,但是客户对产品的感知和产品的实际特性一样重要,客户对产品的认知度被称为“品牌”。

“营销组合”的价格元素是客户为获得产品所付出的资金数量。近几年来,不少营销专家认为公司应该在一个较宽泛的意义中来考虑价格因素;也就是说,价格应该是客户为获得产品所付出所有费用(包括交易费用)的总和。从该总成本中减去客户从所获得的产品中得到的收益就能产生客户从交易中获得的客户价值的估计值。Web 为创造性定价提供了新机遇,也为在线拍卖、反向拍卖及群体购买战略的价格协商创造了新的机遇。这些基于网络的机会正在帮助公司发现新的增加客户价值的方法。

促销包括发布有关产品消息的任何方法。在因特网上,极大的推广可能性存在于与现有客户和潜在客户的交流之中。公司已经使用因特网、电子邮件及其他的方法与他们的客户进行拓展业务。

多年来,营销经理都梦想着能存在这样的一个世界:当客户有所需求时,公司能够在最短的时间内满足他们的需求。场所(亦称为配送)是指在各个不同地点获得产品或服务的一种需要。自商业存在开始,公司一直在苦恼如何在最好的时间把正确的产品送到正确的地方的销售问题。虽然因特网尚未解决所有的这些物流管理和分配问题,但总有一天它能够做到。例如,数字产品(如信息、数据、新闻、软件、音乐、视频和电子书)通过因特网已经被近乎即时传送以满足客户需求。从事产品销售的公司应当已经发现,因特网给予了他们相对早先信息技术而言更好的产品追踪和控制能力。

1. 以产品为基础的营销策略

现在,你已学习了关于公司的网站存在的重要性,同时也应该了解在公司进行推广活动时,这种存在如何与商标或其他已经建立的形象相整合。多数公司一般提供多种产品来吸引不同消费者群体。当制订一个营销策略时,经理必须同时考虑其产品与其潜在客户两者的性质。

许多公司的经理总是依照其公司所销售的产品或服务来考虑他们的生意。因为公司花费了很大的精力,时间和费用来设计并制造那些产品和服务,所以这是一个合乎逻辑的考虑生意的方法。如果你要求经理描述一下他们的公司正在卖的产品,通常会提供给你一本关于他们正在销售或用之制造服务的实物的详细目录。当客户可能根据产品分类目录来购买产品,或是依据产品分类目录来考虑他们需求的时候,这种以产品为基础的组织类型就显得颇具意义。大多数的办公用品在线商店相信他们的客户会根据产品分类目录来组织其需求。例如,Staples 公司的主页就是将产品分类目录作为一个强有力的产品促销手段。

在 Staples 公司网站页面的最上方,有直达产品分类目录的标题链接,较详细的产品分类介绍则填充页面的中心。Staples 这样设计网站页面的用意在于满足那些已在脑中形成一个特定产品类别的客户的需要。甚至在页面顶端的搜索条中亦包括一个关于产品种类目录的下拉菜单,它可以帮助客户缩小其搜索的产品种类范围。

Sears 是一家将产品出售到不同市场,运用相似的以产品为基础的营销策略的公司。在开设其网站之前的很长一段时间内,Sears 先是通过产品目录,随后又通过实体店销售其产品。而在过去的许多年中,多数的公司是借印刷出来的产品目录来组织其销售活动的。例如,Sears 就已经将其以产品为中心的市场营销策略延续到了其网站上。

以上这两个公司都正在使用以产品为基础的营销策略。他们从内在的角度来设计组织和建设网站,即依照其产品设计和制造流程的安排来设计网站。如果访问网站的客户是来寻找一种特定类型的产品,那么这就是一个很好的工作途径。相反,对于那些已有明确需求的客户,譬如其需要的只是装修一个新的办公室或是选择一份毕业礼物,那么这样设计的网站看起来并不那么有用。

许多营销研究员和顾问建议公司把他们想象成为自己的顾客,然后再来设计他们的网站,以帮助客户满足他们的个性需求。

2. 基于客户的营销策略

你已经了解了网络能够创造一种环境,在这种环境下,买卖双方可以进行复杂模式的沟通。与广播和印刷广告这些传统大众媒体的沟通结构相比较,网络沟通结构更加复杂。当公司通过网络开展其商业活动的时候,应该能够创建一个有足够柔性的网站来应对不同访问者的需求。公司应该建立能够满足不同类型客户特定需求的站点,而不能仅仅建一个产品展示的站点。

制定一个基于客户的良好营销策略的第一步就是要甄别拥有共同特性的客户群体。有个叫 Sabre Holding 的公司,它为旅游业提供营销服务及支持这些服务的技术。它的客户包括旅行社、航空公司、拥有旅行部门的大公司及旅游混业公司(这些公司会大批量的购买飞机机位和旅馆房间,而后再将其作为“度假套餐”打包转售)。Sabre 同时也经营着一家叫 Travelocity 的 B2C 旅游网站。Sabre Holdings 设计其网站的每一个单独的部分以满足每个主要消费群体的需求,而主页上包括所有通向这些部分的链接。沿着这些链接,Sabre 的不同客户将能找到对应他们需求的特定产品和服务。

尽管 Sabre 在开始时就将其客户分为四个主要群体的办法是好的,但这仅仅是第一步,也许在这四个大客户群之中还存在着更小的子群体。营销人员能够运用其在行业中所积累的销售经验发现这些更小的群体,并借助这些经验制订出能够有效接触这些小客户群的营

销策略和战术。在 B2B 网站上,基于客户的营销方法被大力倡导。相对于 B2C 网站的运营者,B2B 卖家更清楚知道,要满足他们客户的需求,就必须客户化他们的产品和服务。近几年来,B2C 站点逐渐地将以客户为基础的营销元素加入了他们的网站之中,而这个方向的最引人注目的趋势之一则体现在大学网站中。在网络发展的早期,大学网站通常是围绕学校的内部元素来构建的(例如系,学院及项目)。而在今天,大多数的大学网站主页上都包含了通向网站不同部分的链接,网站上这些不同的部分是为特定的参与者而设计的,如面向现有的学生、将来的学生、学生的家长,潜在的捐献者和学校的员工等。

第 13 单元 课文 A:持续发展的信息经济

信息经济是将迅猛发展的信息作为经济工具发展起来的一种经济。信息资源如何被利用,逐渐成了企业竞争的核心。对信息和通信技术(ICT)重要性的一再强调,是因为它是贸易和技术进步过程的关键促成工具,同时也对因特网的快速增长时也对此进行有力的说明。在此,我们讨论与信息经济的出现相关的核心趋势和发展。

1. 信息经济的性质

信息经济的发展与现代经济的内部改革进程密切相关。尼葛鲁庞迪强调这种经济变革是关于从原子创造(即进行产品生产)到基于比特的产品与服务创造的财富创造变化。图 1 中,在这种变化的核心特性下划线,以强调信息经济的发展具有怎样的替换贸易环境所有方面和特性的充分潜力。这张图表显示,通过商业和其他参与者逐渐增加对信息及相关技术的运用,信息经济可以创造出新的工业结构,趋向和新的产品和服务。可以证明,最重要的变化是从交易市场(即一个买卖双方会面的单独的场所)转变到一个不用依靠物理接触就可以进行交易的、更为广阔交易空间。这可能从根本上改变目前所盛行的商业模式的所有方面。它亦可能推动企业从传统的层级组织结构转变为基于网络的组织结构,也会需要公司员工具备新技能(见下文)同时也可能显著地改变物流流程。另一个值得处于信息经济中的企业注意的特征是,资源基础是如何被预期改变,就像是一次从缺乏到过渡的改变(鉴于考虑到数字产品和资源能够被不断的复制)。

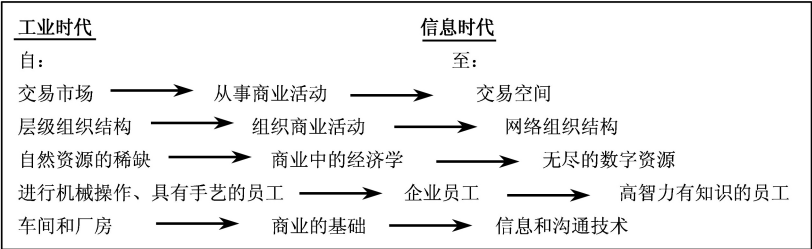


图 1 工业时代向信息时代的转变

Paranov 和 Yakovleva(1998)预期信息经济大致要经历 4 个主要过程:

- (1)因特网技术和应用的发展;
- (2)因特网上经济“移民者”的发展(特别是通过电子商务形式的发展);

(3)组织设计网络化的出现;

(4)机构设计网络化的发展(尤其是为了贸易,财政和劳动力)。

重要的是,Paranov 和 Yakovleva 强调因特网将会在信息经济的发展和建立中充当一个关键角色。因特网正逐渐地拓展出一个开放的自由市场经济,而处于这个开放自由市场经济中出售各种实体或非实体产品的自由代理人,也如他们以往通过传统媒介出售产品和服务那样,通过因特网展开了他们的贸易。这些变化如同信息和相关技术变得更加显著那样,也已经延伸到了物流流程(例如,延伸到了配送和营销流程)之中。

主要的问题在于,信息经济的演进创造了一个关于新的产品和服务的需求,这个需求要求贸易流程的效率和效能的改善和增进,这已是普遍存在的趋势。BT 在近几年的一项调查中强调了这一趋势。该调查指出,超过 90%的企业认为技术发展是贸易变革的主要内容之一,88%的企业认为维持企业的核心竞争力在于对最新技术的应用。同时,82%以上的企业预计信息将会成为未来几十年内的重要战略武器;90%的企业认为无线通信和其他的一些信息和沟通技术,将会在联结企业与其客户和供应商的关系中,发挥更为重要的作用。由 Tap Scott(1995)提出的关于信息经济的发展对贸易环境的更多方面的影响,主要包括以下方面的内容:

- 在财富创造中,知识充当了主要角色;
- 数字工人的出现;
- 作为关键使能者的数字技术的角色;
- 虚拟经济活动的开展,如商业关系能够超越很大的地理距离进行联结;
- 如同在 ICT 的应用之下组织机构解散一样,越来越多的组织也在化解为众多分支机构;
- 网络逐渐变为经济活动的中心;
- 直销的增加就像网络剔除了中间人;
- 内容,信息技术和无线通信等技术的集中综合;
- 企业经营业绩方面改革创新的显著增长;
- 消费者与生产者双方的不同角色区别界限开始模糊;
- 贸易活动变得更加快速;
- 经济全球化成为主流。

值得强调的是,信息经济并不等同于网络贸易的改革,它近乎是一种超越单一技术的贸易影响。信息经济也是关于(在其他的事物当中)实际的生产流程中 ICT 的出现、辅助性服务和产品(如外购)的,它们不但促进了网络的利用和价值,而且引起上述内容中被强调的商业问题。结果是,公司已着眼于诸如现在的贸易环境并检查 ICT 的应用能如何改良贸易环境,与信息经济发展相关的流程。必须认识到,信息经济并不仅仅是大众的信息视角,而是在一个信息和知识是贸易成功关键因素的时代,对商业和经济的需求所做出的实际回应。

第 14 单元 课文 A:众筹

众筹是一个项目或投资由一大批人筹集资金的做法,通常是通过互联网。一个早期股权专家将其描述为“通过互联网,从两个或以上的人为一个共同的项目、产品、服务、投资、事业和经验(或 SPICE)筹集资金的做法。”

众筹的另一个可能的前身是 19、20 世纪的合作运动,在合作组织中,社区或基于利益的团体,归集认购资金开发新概念、新产品,以及新的流动和生产手段,尤其是在西欧和北美农村。

最早有记录使用“众筹”这一词是在 2006 年 8 月,作为一个概念出现在互联网之前。获得带动是在 2003 年 Artistshare 推出后。随后,更多的众筹网站开始出现在网络上。2010 年众筹网站帮助公司和个人在世界范围内从其无数的成员中筹集 8900 万美元,2011 年募集到 14.7 亿美元,2012 年募集到 26.6 亿美元——其中 16 亿源自北美。2012 年全球范围内开展了超过一百万次众筹募集活动,2013 年该行业突飞猛进增长到 51 亿美元。

一份 2014 年 5 月报告的数据显示,2014 年 3 月期间,全球范围内融资活动中每小时募集到的资金超过 6 万美元,同时在此期间全球每天进行 442 项众筹募集活动。

1. 概要

众筹参与者

众筹模式主要由三种类型的人员推动:提出需要融资的想法和/或项目的项目发起者;支持此想法的个人或团体;以及撮合各方观点发起创意的调节机构(“平台”)。

类型

2014 年 4 月众筹集资中心的报告确定存在两个主要类型众筹:

奖励众筹:在不招致债务或牺牲股权/股份的基础上,企业家通过预销售产品或服务推出商务概念。

股权众筹:支持者会用承诺金取得公司的股票,通常是在其早期阶段。公司的成功取决于在多大程度上展示其可行性。

奖励众筹已被广泛使用,包括电影的推广、独立软件的开发、发明开展、科学研究和市政项目。

2014 年的一项研究显示有两种基于奖励的众筹模式被确认。一种是 KIA 模式,就是公司提前设定一个募集目标,无论目标是否实现,发起者都将获得全部已筹款项。第二种是 AON 模式,就是公司提前设定一个募集目标,除非目标实现,否则发起者将不能获得任何募集(退还给募集参与人)。该项研究的研究人员分析了 22875 个募集资金目标在 5,000—200,000 美元的众筹募集活动,总结道“总体而言,AON 模式的募集活动都涉及大量的资本目标而且在实现方面很容易成功”。在对研究结果的评论上,Inc. com 的出版物解释说潜在的投资者更倾向于“AON 战略”倡议,在这种倡议中融资目标如果不能实现,不会有次标准产品发布。Inc. com 的评论总结说,AON 模式战略通常能够提供关于募集活动的详细信息。

股权众筹是通过众多个人的集体努力,以股权的形式提供融资来支持由其他人或其他组织发起的活动。在美国,2012 年的 JOBS 法案立法中提到,将允许更大范围的小投资者归集资本金,减少对于实施该法案的限制。

在美国,随着 Lending Club 的建立,基于非银行的债务众筹作为一种众筹模式在 2012 年变得更加突出,截至 2012 年 4 月,Lending Club 已经通过网站促成了超过 5 亿美元的贷款。潜在的借款人首先提交他们的要求,然后与愿意接受贷款条件的投资者资金池进行匹配。随着银行利率增加以及借贷活动水平减少,像 Lending Club 这样的平台受到欢迎。另

一个基于信用的平台是 Prosper.com,它成立于 2006 年,截至 2012 年 4 月已经为 3.25 亿个人贷款提供资金。

诉讼众筹允许个人投资法律纠纷,在全球范围内,允许那些有诉讼的资金需求者在世界上任何地方都能从同伴中获得资金需求。给予个人投资者一定的索赔利益份额,如果一个案子成功,个人投资者的收益将获得数倍回报。

慈善众筹就是个人帮助慈善事业的集体努力。

2. 大众的作用

大众个体的投入启动了众筹程序并影响标的的最后价值或者流程结果。每一个个体都作为一个标的的代理人,筛选和促成他们所信任的项目。他们有时会扮演捐助者的角色,向社会项目提供帮助。在某些情况下,他们将成为股东为标的的发展壮大贡献才智。个人可以在他们的网上社区传播他们所支持项目的信息,带来更进一步的支持(推动者)。

消费者参与的动机源于一种感觉,那就是至少部分地参与了别人的创业成功(赞助欲),努力成为社会公共倡议事业的一员(社会参与欲),并追求捐款的回报(投资欲)。

参与众筹创业的人往往有一些鲜明的特点:创新指向,创新指向能刺激他们想尝试新的与公司和其他消费者的互动方式;对于所选择给予融资的内容、事业或项目的社会认同,这激发了他们成为倡议成员的渴望;(货币)作用发挥,这个特性激励个体以期望回报为目的的参与。

3. 众筹平台

截至 2012 年,共有超过 450 个的众筹平台。对于平台,项目创建者要履行自己的尽职调查责任,搞清楚哪个是最适合他们的想发起的项目类型。众筹平台所提供的服务差异很大。

例如,Crowdcube 和 Seedrs 这两个互联网平台,他们都能够让小公司通过互联网发行股份并从注册用户中获得小额投资。Crowdcube 的设计是为了让用户少量投资并直接从初创企业购入股份,而 Seedrs 众筹平台被设计用作汇集资金投资新商业,平台仅仅作为一个名义代理人。

好的众筹平台通过安排标的物,发挥的是“网络管弦乐演奏家”的作用。为诸多参与方的资源整合,他们要建立必要的组织系统和条件。

相关协调者是供给和需求之间的中介。他们取代传统的中介机构(如传统的唱片公司、风险资本家)。这些平台是新艺术家、设计师、项目发起者和坚定的支持者之间的纽带,这些支持者相信项目背后的人并强力地提供财力支持。

增长的动力集中在投资者的强力接纳,他们通过消除之前所在的旧网络中的服务提供者的一些环节而实现脱媒(免中介),众筹平台从直接匹配高净值私人投资者人群与项目发起者身上获取收益。

4. 众筹的应用

众筹正在被尝试作为创造性的工作融资的一种机制,如博客和新闻、音乐、独立电影,也是为初创公司融资的机制。社区音乐标签通常贴到以营利为目的的组织身上,借助于融

纪录片过程“歌迷实际上充当了传统标签唱片的融资人角色”

自从电影业最早开始众筹之后,Spanner Film 已经发布了操作指南。发表在 2013 年 9 月中旬的《金融学家》的一篇文章指出:“电影业众筹的规模预计达 100 万~1000 万美元”,众筹活动“成功的可能性很大,假如他们能够充分利用之前就存在的影迷基础并填补市场存在的鸿沟”。一些创新性的新平台已经出现,比如 RocketHub,它们综合了为创新工作融资和品牌众包的优势,帮助艺术家、企业家与乐队联合,从而免去对于中间人的需要。

5. 慈善事业和市政项目

各种众筹平台已经出现,使得普通网民不需要大量的钱就能支持具体的慈善项目。

GlobalGiving 众筹网站允许个人浏览经过筛选的、由非营利组织提出的世界范围内的小项目,然后捐赠资金给他们选择的项目。小额信贷众筹平台(如 Kiva(组织)和 Wokai)则助力于便利在发展中国家由小额信贷组织管理的贷款众筹。

美国的非营利机构 Zidisha 对这些问题提供了一个新的变革,把直接的个人对个人的借贷模式应用到对发展中国家的低收入小企业主的微贷款,小额信贷在小企业贷款。通过背景调查后的 Zidisha 借款人可以直接在 Zidisha 网站上公布微贷申请,说明贷款条件和利息。在美国和欧洲的个人网络用户可以借出少到 1 美元,而且 Zidisha 的众筹平台允许贷款人和借款人进行直接对话。偿还本金和利息返还给贷款人,出借人可提取现金或使用它来资助新的贷款。

DonorsChoose.org 成立于 2000 年,它允许美国公立学校的教师在网站上征集他们课堂所需的材料。个人可以借钱给老师提出的项目,组织机构可以应诺老师的请求和提供物资给学校。也有一些有名大学有自己的众筹网站,学生和员工创建项目接收来自大学校友或公众的资金。

一些专门的市政项目众筹平台已在美国和英国出现,其中有些众筹项目已经出现了政府的首次直接参与。

6. 房地产众筹

房地产众筹是利用网络从投资者手中汇集资本金为以房地产作为抵押物的抵押贷款筹集资金,如为“修复和翻新”不良或废弃的财产募集资金、为商业和住宅项目的股权募集资金,为收购的不良抵押贷款池和为购房者的首付款以及类似房地产项目募集资金。通过专业的网络平台完成投资一般要受 JOBS 法案第二条的制约,只有受信的投资者才能进行。通常平台提供最低投资额是 100~10000 美元。

7. 知识产权风险

在众筹网站公布新思想的挑战之一就是,网站本身可能有很少或没有知识产权(IP)保护。一旦一个想法贴在网站上,就有可能被复制。就如 IndieGoGo 的创始人 Slava Rubin 所言:“我们一直被问这样的问题,‘你怎么保护我不至于别人偷了我的想法?’我们不能为任何东西负责。”一些发明的拥有者,如西蒙布朗,他是总部位于英国的联合创新协会的创始人,他建议在把创新的思想公布到众筹网站以前先提交专利保护申请,使用版权保护和商标保护措施以及世界知识产权组织支持的一种新的思想保护手段,即创意条形码。

8. 众筹的好处

除了严格的财务收益,众筹活动为生产商提供了一些好处。以下是众筹非财务利益。

关注度——引人注目的项目可以提高生产者的关注度和提振他们的声誉。

营销——项目发起人可以显示他们的项目以获得观众注意而且有市场。假如募集活动失败,它也算提供了良好的市场反馈。

观众的参与——众筹创建了一个论坛,在这个论坛上项目发起人可以与他们的观众交流,观众也可以通过跟进追踪来自发起者的进展更新情况参与生产过程,也可以通过项目众筹网页的专题评论文章分享反馈信息。

反馈——作为募集激励的一部分,提供项目的支持者获得预发布内容或测试内容的机会,这能使项目的发起人快速获得一个好的市场的测试反馈。

众筹的支持者认为,众筹能使那些不符合传统金融家要求模式的好主意通过大家的智慧获得突破、吸引到资金。如果这种“牵引”的方式成功,企业家不但能获得初创期的种子基金,而且也能获得来自潜在客户的支持证据,并且还会获得为实现筹资目的而需要的口碑提升。另一个潜在的积极效应是:群体倾向“会产生关于市场结果的一个精确的综合预测”。(关于这一点,作者 James Surowiecki 在他的书《群众的智慧》中提出。)从而将融资支持的企业推向成功的可能。

支持者还发现,众筹的潜在后果是可获得的风险资本的指数增加。一份报告声称,如果每个美国家庭将他们的可投资资产的百分之一用于众筹,那么 3000 亿美元(10 倍增加)会进入风险资本。支持者还指出,接受众筹支持的公司的的好处是,保留他们对公司的经营控制,因为众筹时,投票权不会随着所有权而转移。

作为对阿曼达帕尔默的 Kickstarter 争议反应的一部分,奥比尼表达了他对音乐家众筹的支持观点,他解释说:“我已经说过很多次,我认为他们是新乐队和新的观众互动的一部分,他们可以成为一个出色的资源,本质上使得乐队和他们的观众合作共事。”阿尔比尼描述众筹是“相当有魅力”的概念。

9. 众筹的风险和障碍

众筹也会有一些潜在的风险和障碍。

声誉——没能实现预期活动目标或者没产生预期利益会导致公众中声誉受损。实现了募集的财务目标而且也成功地获得了大量的公众支持但却因为某些原因不能够运行到项目中去,这会对一个人的声誉产生严重的负面影响。

知识产权保护——许多数字互动媒体的开发者以及内容生产商,基于创意可能被盗或者保护他们的知识产权受到剽窃的担忧,在生产前不愿意公开宣布项目的细节。

捐助者热情耗尽——有一种风险就是加入同一网络的支持者被召募多次,该网络最终会停止给予必要的供给支持。

公众对于滥用资金的恐惧——众筹的支持者会担心在没有规制缺位的情况下欺诈和资金滥用的可能性很高。这种忧虑也可能成为公众参与的障碍。

对于股权众筹,有一项社会心理研究表明,就像其他所有的投资一样,人们在做出投资前不总是会做出尽职调查从而搞清楚是否是一项无暇的投资,这种现象会导致人们做出投

资决定是基于情感而不是基于财务逻辑。

众筹吸引一群人:投资者和其他感兴趣的观察者,他们跟进或者不一定跟进项目的进展。有时事实证明筹集项目资金比成就项目本身更容易。管理与大量的、可能令人失望的投资者和支持者的沟通,其任务是巨大的,也有可能是很有意思的。

第 15 单元 课文 A:信任在电子商务成功中的作用

互联网的快速发展将对电子商务带来很大帮助。对电子商务来说,互联网技术的运用是一个必需的渠道,但仅有它是不够的。电子商务的成功很大程度上可以归因于两个因素:一是人们在在线商务上建立的信任关系,二是他们网上进行商业交易时感受到的安全程度。一般,人们需要经历很长一段时间才能建立起信任关系。现实世界中,人们是通过对公司组织的观察和第三方的介绍来获得信任的。信任可产生再交易,而这是取得成功的一个必要因素。安全是所有公司都想努力提供的。在互联网上有几种可利用的工具来提高安全。安全套接层协议(SSL)和安全电子交易(SET)正是两种这样的工具。许多文献已从很多不同的角度对网上信任进行过研究,例如交易、制度、技术、产品和信息内容。

1. 有助获得信任的因素

信任不易衡量,它需要时间来获得发展。人们信任某一交易是基于他们过去的经验或第三方推荐。在网上商业世界中,有助于提升信任的重要因素是:

- 产品或服务在描述时的难易程度;
- 下订单的难易度;
- 订单确认;
- 订单跟踪;
- 售后服务。

这些性质支持着目前的关于信任的定义。因此在顾客对交易产生信任感以前我们必须让他们在以上的每一方面都有良好感受。

公司产品和服务如果是一个树状结构的设计,那么就便于顾客浏览。就网页设计来说,有许多可利用的工具可以使此网址变得有吸引力也便于顾客浏览。通过使用数据库工具,公司很容易获得实时网上数据例如当前(访问者)数量。像亚马逊这样的网络公司已经为软件的增长做出了很大贡献,这些软件使得下订单非常容易。目前有些第三方销售商提供网上购物车设施。网上购物设施实际上等于BAM世界的产品订购的惯例。电子商务中的订单确认也是对BAM惯例的一个复制,客户能够准确地看到自己所订购的东西。现在的技术可使订单确认变得很方便。目前最常用的方式是通过电子邮件。因为发货信息的送货是通过一个独立的载体,所以大多数时候订单跟踪信息是稍后传来的。但是只要把订单跟踪信息与订单历史记录链接起来,问题就迎刃而解。最好当然是由送货方来全面处理订单跟踪信息。为了成功建立信任,公司需要和送货方合作共享信息。售后服务在赢得顾客忠诚和信任方面上发挥着重要作用。电子商务中,顾客很有可能离销售方很远,但同时他们又可以二十四小时登录销售方的网站。这种时间不对称使得电子商务公司必须依赖自身的信息系统来促进售后服务,例如商品的退还。在这一过程中产生的任何瓶颈都将成为一个失去顾客信任的主要因素。

2. 中介在信任关系建立中的作用

之前,我们已讨论过建立完善的售后服务程序的必要性。其中一种方式是通过中间人,这种方式具有双重的优点。正如我们以前所提到过的,许多顾客不了解网上商务。但是,他们非常有兴趣和网上公司进行交易,因为所提供的产品或服务对他们具有有益的方面。他们主要是对这种商务缺乏了解。另一方面,顾客们非常信任大的金融机构。所以他们利用金融机构的中介作用来作为对商户支付的保障,同时向客户保证他们的满意是至高无上的。金融机构例如“第一虚拟”公司从顾客收取订单的金额并按照签订的合同负责保管一定的时间。卖方通常对买方先支付感到满意。顾客也是对这点感到满意,因为如果他们所订购商品与所预期的不一致,他们有一个可靠的中间人可以协助调解。这种附带条件实现后交付契约账户的形式在 BAM 世界已经得到了实践的验证。第一虚拟“First Virtual”公司在网上已经采用了这一理念。下面,我们将考察起着不同作用的可信任的第三方。这些可信任第三方称为“代理商”。代理商的主要职责就是在一些卖方和全世界上的顾客们之间充当中间人。他们是独立的并且有偿提供服务。

他们担任中间人的职责在于解决冲突和实现顾客满意。而为了起到他们的中介作用,他们必须建设必要的信息基本设施。他们通过其他可信赖的机构来与顾客结识,这些机构,如商业服务监督局,授权给他们印章。

3. 数字印章和信任

在世界上,有些为消费者着想的独立机构例如商业服务监督局,以及保险商试验所赢得了顾客信任。他们在 BAM 所做的一切同样适用于电子商务中。他们用严格的鉴定手段来评估商品和服务。一旦产品或服务符合他们严格的标准,那么该组织便会同意在商业网站上使用他们的印章。在公司网站上运用这样的数字印章可以给普通消费者带来很大的信任感。这是另一种公司赢得信任的方式。使用数字印章有一个危险,那些意欲欺骗顾客的公司可以轻而易举的复制一个可信任机构的印章,并将它放在他们公司网站上。等到发现这一欺骗时可能为时已晚。克服这一缺点的唯一办法就是教育顾客按照 BAM 世界的做法去做。当顾客对某一商业声明的真实性产生怀疑时,他们可以电话咨询可信任的第三方去求证它的声誉。通过对数字印章提供者的在线搜索可以很容易完成同样的工作。

4. 信任和安全

到目前为止,我们考察了关于建立信任的各个方面。对总体的电子商务及信任同样重要的东西是安全方面。电子商务的早期阶段许多顾客仅仅是因为出于对安全问题的担忧而纷纷远离网上购物。幸好由于 Netscape 公司所付出的巨大努力,SSL 技术被开发出来了。很快,很多像亚马逊网络这样的公司利用 SSL 技术提供的安全得到了很大的发展。现在仍然有很多银行和商业公司使用 SSL 技术和其他加密技术来提供安全在线服务。另外,数字证书也是目前能够获得的、用来提升信任的一种工具。此外,还有一种保证交易安全的工具是 SET 协议。它是一种为基于网络支付卡交易方式而设计的网络交易协议。SET 的核心是加密,他运用加密来减少欺诈,使参与各方的风险最小化。SET 最主要的好处是它能够

以可信任和自发的形式为网上金融交割提供方便,即使双方之前是互不相识的。SET 的三大主要目标是:真实性、无法抵赖性和完整性。

5. 信任模型

到目前为止,我们的分析表明,消费者信任的出现是由于 BAM 在电子商务中的存在许多 BAM 企业运用电子商务来扩大他们的生意。这一信任模型的主要组成部分是信任印章,安全和金融机构(见图一)。几乎所有出现在电子商务交易中的金融机构都在 BAM 中存在。这也使模型的含义得到加强,那就是信任是可以传递的。信任某一 BAM 公司的顾客也会信任这一公司开展的电子商务。这一模型也表明了如何利用可信任的第三方在电子商务中建立消费者信任。模型也显示很多不存在 BAM 的电子商务也有很多渠道建立消费者的信任。总之,所有的电子商务公司必须通过各种途径来促进顾客信任机制的建立。

第 16 单元 课文 A:规划电子商务行动

对于绝大多数企业来说,规划、设计及实施具有凝聚力的电子商务战略的能力将决定他们能否取得成功。成为第一个采用新方式在网上开展商务能够为公司赢得巨大的影响力,已经引起许多产业内高层的注意。任何信息技术项目成功实施的关键是项目的规划和执行。对于电子商务活动来说,一个成功的商业计划应当包括确定活动的具体目标,以及把这些目标和企业的经营战略衔接起来。

确定目标

企业开展电子商务活动有各种各样的理由。企业通常努力通过电子商务来完成的业务目标包括:提高现有市场的销售,进入新市场,为现有客户提供更好的服务,寻找新的供应商,与现有供应商更好地协调或提高招聘的效率。

企业目标的类型随着组织规模大小的改变而改变。例如,小公司可能需要建立一个鼓励访客利用其作为通道来做生意的网站,而不是通过网站本身降低其成本。一个仅提供产品或信息服务的网站比提供交易处理、招投标、通信或其他能力的网站在设计、建立并维护方面耗资更少。电子商务计划的资源决策应该考虑预期效益和预期成本。这些决策也应考虑电子商务活动固有的风险并将他们与不作为的风险对比——不作为可能会把自己的战略优势让步给竞争对手。

将目标与商业战略衔接

企业可以采用下游策略,关注企业为客户提供的价值。企业也可以采取上游策略,即强调通过与供应商或内向船运、空运服务商合作降低成本、创造价值。

对许多公司而言,网络是一个有着巨大吸引力的销售渠道,但是企业可以利用电子商务做的远不只是销售。他们可以利用网络来完善其商业战略及提高其竞争地位。电子商务带来的机遇可以支持企业开展如下活动:

1. 建立品牌
2. 改进现有营销方案
3. 销售产品和服务

4. 销售广告版位
5. 更好地了解消费者的需求
6. 改善售后服务和支持
7. 购买产品和服务
8. 管理供应链
9. 进行拍卖
10. 创建虚拟社区和门户网站

衡量效益和成本正变得越来越重要。一个好的实施方案应该为预期效益和预期成本设定明确的目标。在许多情况下,公司往往会创建一个试验性的网站来测试电子商务计划,当测试运转良好的时候公司就会发布一种网站产品版本。公司必须为其先行性实验设定明确的目标以便他们清楚这个网站在什么时候就可以完全投入运行。

收益测度

电子商务活动的有些效益是可见的并且容易测量,例如提高销售量或降低成本。有些效益是不可见的而且难以测量,比如提高客户满意度。当确定效益目标的时候,管理人员应设法使目标能够加以测量,即使是属于不可见的效益。例如成功实现了顾客满意度的提高可以通过计量客户回头率来加以测量。

许多公司创建网站的目的是为了建立品牌或改进现有营销方案。这些公司可以在增强品牌意识方面设定目标。通过网站销售产品或提供服务的公司,可以通过出售货物的数量单位或金额来衡量销售量。对于那些想利用网站来改善客户服务或售后支持的公司,它们可以把提高顾客的满意度和降低提供服务 and 售后支持的成本设定为自己的目标。

许多公司可以使用多种类似的测量方法来评估电子商务活动的效益。供应链经理可以测量供应成本的降低,质量的改善,以及预定货物的交付速度。拍卖网站可以就拍卖的数量,出价人和卖家数量,卖掉物品的金额,卖掉物品的数量或注册用户数量来设定目标。不管一个公司采用何种方式来测量网站的效益,它通常也就是尽力把这种粗糙的测量方式转换成用金额来衡量。

管理成本

许多项目经理已经发现信息技术项目的成本和其效益一样难以估计和控制。由于网站建设所使用的硬件和软件技术比其他信息技术项目的软硬件技术变化得要迅速,项目经理经常发现自己的经验对他们估算成本并无多大帮助。变化最大的是硬件成本的不断下降,但软件复杂性的日趋增加需要更多便宜的新硬件,这通常又导致了硬件总成本增加。越复杂的软件花费的代价自然就会比最初的预算更高。尽管相比其他的信息技术项目,电子商务计划往往能在较短的时间框架内完成,但是网络技术的迅速发展能够很快摧毁一个经理精心部署的计划。

比较收益和成本

大部分公司都有一套对任何大的资金支出进行评估的程序。这些用于设备、人员,以及其他资产方面的投资被称为资本项目或资本投资。公司用来评估自己资本项目计划的技术范围从非常简单的计算模式一直到复杂的计算机模拟模式。但是,不管技术多么的复杂,最后它终归是效

益和成本的比较。当一个项目的效益超过成本一定幅度的时候,该公司就会投资此项目。

规划电子商务项目的一个关键是识别潜在效益(包括雇员满意度和公司声誉等无形资产)和确定获得这些效益所需要的成本,以及评估效益是否超过了成本。公司应采用成本和效益比率法来评估电子商务战略的每一组成部分。

投资回报率(ROI)

你可能在会计或金融课程中已经学到一些资本项目评估技术,如投资回报评价办法,净现值法或内部收益率法。这些评估方法被称为投资回报率(ROI)法,因为他们测量的是即期支出(投资)将会产生的收入额(回报额)。投资回报率法为特定的公司提供了边际成本与边际收益的定量表述方法。他们在计算上也适用那些投资收益降低的远期投资(远期得到的收益比即期得到的收益要少)。

练习参考答案

Unit 1

I. Fill in the blanks according to the text.

1. nobody 2. business 3. Internet 4. face-to-face 5. purchase
6. where 7. flick 8. being 9. beyond 10. play

II. Translate the following sentences into Chinese.

1. 人类进入 21 世纪以来,有些人认为电子商务是一个又被滥用过后而被丢弃的时髦词。
2. 电子商务不同于电子事务,电子事务包含所有的通过电子手段进行的信息交流活动。
3. 电子商务构建了一个买卖双方可以“会面”并且相互交易的场所。
4. 电子商务不仅仅是一项技术,它是从事商业活动的方法,极深地影响着公司价值链的每个方面。
5. 市场一旦用电子操作,商务中心不再是实实在在的建筑物,而是进行商务活动的网络地点。

III. Translate the following sentences into English.

1. Few innovations in human history encompass as many potential benefits as EC does.
2. E-commerce enables more individuals to work at home and to do less traveling for shopping.
3. There are dozens of applications of EC such as shopping online, buying stocks, finding a job, conducting an auction and etc.
4. By using the Internet, manufacturers can directly contact customers without using intermediaries.
5. EC is the delivery of information, products/services, or payments over telephone lines, computer networks, or any other electronic means.

IV. Answer the following questions.

1. There are a variety of different types of EC and many different ways to characterize these types. By the nature of transaction EC field classified into six types. ① Business-to-Business(B2B) EC ② Business-to-Consumer(B2C) EC ③ Consumer-to-Consumer(C2C) EC ④ Consumer-to-Business (C2B) EC ⑤ Nonbusiness EC ⑥ Intrabusiness (organizational) EC.

2. ① As computer network facilities information exchange in a speedy and inexpensive way, the Internet now penetrates into almost every corner of the world. High-speed network makes geographical distance insignificant. Business can sell goods to customers outside traditional markets, explore new markets and realize business

opportunities more easily. ② Businesses can gather information on products, buyers and competitors through the Internet so add to increase their own competitiveness. ③ The Internet provides companies with markets in the cyber world and numerous chances for product promotion. In addition, their relationships with buyers can also be enhanced. ④ By the use of multi-media capabilities, corporate image, product and service brand names can be established effectively through the Internet. ⑤ Detailed and accurate sales data can help to reduce stock level and thus the operating cost. ⑥ Detailed client information such as mode of consumption, personal preferences and purchasing power, etc. can help businesses to set their marketing strategies more effectively.

Unit 2

I. Fill in the blanks according to the text.

1. interconnected computer networks 2. technical 3. communications protocol
4. TCP/IP 5. file transfer system 6. E-mail protocol 7. remote login facility
Telnet 8. IP address 9. computer incompatibility 10. hypertext

II. Translate the following sentences into Chinese.

- 近几年来,公司企业都可以通过网络来互相联系,并可以在网上与客户沟通。
- 互联网是一种信息和通信技术的应用,它不受任何电信基础设施提供商的控制。
- 然而尽管互联网设计简单又缺乏正规管制,它却已发展成为一个全球性的网络;或许正是由于它不受正规管制才使它取得了成功。
- 超文本软件可以使信息以一种网络式的结构来连接,而不是以一种线形或金字塔式的形式来呈现。
- 那些附加的特点和其他的浏览器,以及超文本标记语言标准并不总是兼容的,这使得网页设计的工作更加困难,因为网页提供商不能确定用户正在使用的是哪种浏览器。

III. Translate the following sentences into English.

- With the origin of a US military project, the Internet has been a large system of interconnected computer network that spans the globe.
- TCP/IP includes many protocols with transmission control protocol and Internet protocol as its most important ones.
- TCP is responsible for dividing messages into packets with one header including a package sequence number in every packet.
- The Internet is not owned and controlled by an individual or an organization, and everyone can engage in it.
- The Internet is an interconnected computer network; therefore, a computer that adopts TCP/IP protocols and can communicate with any server in the Internet can be considered to be a part of the Internet.

IV. Answer the following questions.

- The Internet is a large system of interconnected computer networks that spans the globe, and it can be used to communicate by a number of means. It is a pattern of usage of

information and communications technologies that transcends any telecommunications infrastructure providers. The Internet is, at a technical level, defined not by the equipment but by its communications protocol, Transmission Control Protocol/Internet Protocol (TCP/IP). The Internet is, at another level, defined by the people who use it.

2. Firstly, the Internet originated a US military project, the ARPAnet, with the aim of exploring packet switching technology. Later in the late 1970's and early 1980's further experimental networks were created that were mainly used for E-mail within and between university departments. In 1982, the TCP/IP protocol was established introduced for use on the ARPAnet. In 1989, an Internet tool that would link information produced by various CERN researchers was developed. That is what we call "hypertext" later. In 1993, a software tool called Mosaic was created, and it was a graphical user interface permitting text, graphics, sound and video to be hyperlinked. Then as many companies entered the internet, a fierce competition about the browsers was started, leading to the result of the free use of the browser. Nowadays, there have been tens of thousands of websites in the Internet and it has become an important part of our everyday life.

Unit 3

I. Fill in the blanks with the correct form of the words given below.

- | | | | | |
|----------------|----------------|--------------|------------|-----------------|
| 1. influencing | 2. quality | 3. service | 4. vendor | 5. intermediary |
| 6. testimonial | 7. uncertainty | 8. cognitive | 9. adopted | 10. return |

II. Translate the following sentences into Chinese.

1. 网络融色彩、图画、动画、声音为一体,使得电子商务活动更富有娱乐性,提供潜在的信息体验。

2. 互联网诞生于 1969 年,最初是作为大学和政府电脑网络中主要传输科学信息的一个工具。

3. 机会成本反映了当前使用稀缺资源的成本,是通过放弃了的价值最高的机会或必须放弃的机会的价值计算的。

4. 竞争市场回应产品价格,资源成本和公司利润或损失发出的信号,以提供最佳而不是最完美的解决方案,从而以最可能低的成本获得资源的最大价值。

5. 但是,电子商务并不是一场转换市场的变革,而是一股革新力量,提供了延伸交易选择范围的附加分销渠道。

III. Translate the following sentences into English.

1. The World Wide Web is the most popular and common application for making use of the Internet technology.

2. Life is always about material choices in terms of what and how to produce, how much should be produced and who should get what share.

3. These key economic concepts of markets, competition, price signals, and efficiency help to identify and organize the topics of this book as economic analysis is applied to the phenomenon of e-commerce.

4. The Internet and Web Based E-Commerce are changing both individual consumer behavior and the ways in which firms do business.

5. Competitive market standards, the formation of and reaction to price signals, strategic behavior, and notions of efficiency in the use of scarce resources are all valuable economic concepts that work to explain electronic exchange.

IV. Answer the following questions.

1. First is the phrase “over the Internet”. The Internet is an electronic entity that links individual networks of computers together. Therefore, by limiting the definition of e-commerce to transactions over the Internet, the scope of activity is a bit narrower than might be found in other studies. The second distinguishing feature of the e-commerce definition involves the interpretation of the phrase “doing business”. This phrase has traditionally been associated with the acts of buying and selling a product or service. However, supplying Internet-based information, free of charge, might also be considered as part of “doing business” through e-commerce.

2. They erase distance and time as barriers in the exchange process. They empower consumers by reducing search costs and tilting the information gathering process more favor of the buyer. The ready availability of information and the demise of distance also influence the balance between competition through product differentiation and competition through price. Together, they work to turn differentiated products into commodities, which can lead to lower prices that benefit consumers.

Unit 4

I. Fill in the blanks according to the text.

1. disseminate 2. impersonal 3. advertising 4. direct 5. consumers
6. interactive 7. click 8. two-way 9. target 10. one-to-one

II. Translate the following sentences into Chinese.

1. 网络可以像新闻广播一样报道最新的新闻信息,也可以提供一些严肃报纸上的纵深报道。

2. 网络出版常与广告联系在一起,因为多数情况下它都是免费的,这样可以吸引一些人到刊登有相关广告的网址上来。

3. 一些商业机构最终意识到满足顾客的需要和要求,是推动网络出版成为商业工具的一个重要因素。

4. 网络报纸似乎常被用来查阅上期报纸所错过的一些信息或查看一下求职广告,而非作为一种真正的报纸来阅读。

5. 网络动态出版之所以动态是因为它能够按照用户的要求来定制网页内容传送的方式以满足用户各种偏好的需要。

III. Translate the following sentences into English.

1. The online publishing issues and sells the electronic publications in the Internet.
2. The online publishing has been the main rival of the traditional one. Anyway, the

Internet is gradually developing into the most important and popular medium at an incredible rate.

3. The online publishing forms a virtual, transnational and multicultural information sharing space through the worldwide computers and information systems, and makes the human information resources into a full use.

4. The development of hypertext and hypermedia technologies makes the information transmission in the Internet shift freely among the audio, image and message.

5. The online publishing should conceptually be regarded as a part of the information industry to develop, and combined with the electronic and telecommunication industry with the removing of industry limitations.

IV. Answer the following questions.

1. Online publishing is the electronic delivery of newspapers, magazines, news, and other information through the Internet. One of the oldest examples of disseminating information by online publishing is the publishing of scholarly works for peer review. Other online publishing include newspaper, magazines, news, textbooks, music, artwork, video clips, and movies. Compared with traditional printed newspaper and broadcast news on radio and television, online publishing could provide both up-to-date and in-depth news. Further than that, the browser could be set to select the news of interest to the reader and to leave out the rest. Many companies have been using online publishing as a tool of gaining comparative advantage and market share.

2. Several online publishing methods are in use. They include the online archive approach, new medium approach, publishing intermediation approach, and dynamic or just-in-time approach.

The online archive approach is a digital archive such as library catalogs and bibliographic database. It basically makes paper publications available online.

The new medium approach is being adopted by publishers that view the Web as a medium for creating new material. It is able to integrate hypertext links that offer related stories, topics, and graphics.

The publishing intermediation approach can be thought of as an online directory for new service. It endeavors to help people locate goods, services, and products online.

The dynamic approach is another method of online publishing. The content can be created in real time and transmitted on the fly in the format best suited to the user's location, tastes, and preferences.

Unit 5

I . Fill in the blanks according to the text.

- | | | | | |
|-------------|---------------|--------------|-------------------|----------------|
| 1. virtual | 2. process | 3. influence | 4. systematically | 5. competition |
| 6. movement | 7. efficiency | 8. methods | 9. engage | 10. knowledge |

II. Translate the following sentences into Chinese.

1. 直到本世纪末企业才开始重视这个问题。
2. 货物是流通的,信息也必须如此。
3. 谚语“种瓜得瓜,种豆得豆”适用于任何信息系统。
4. 如果得不到准确的信息,一体化后勤服务将失去效率和作用。
5. 电子数据交换涉及计算机间的直接连接。

III. Translate the following sentences into English.

1. E-Commerce requires that logistics must be systematically organized and managed in the whole society.
2. The delivery system for E-Commerce purchases has to depend on the size of the product, its nature, urgency and the distance that packet will have to travel.
3. Information permeates the logistics system, but, like goods, it must go to the right people at the right time in a useful form.
4. Inaccurate data and poor information disrupt logistics activities.
5. A major problem with EDI is standardization of the language.

IV. Answer the following questions.

1. ILIS is the short term of an integrated logistics information system. It can be defined as: the involvement of people, equipment, and procedures required to gather, sort, analyze, evaluate and then distribute needed information to the appropriate decision-makers in a timely and accurate manner so they can make quality logistics decisions.
2. Integrated logistics is defined as: the process of anticipating customer needs and wants; acquiring the capital, materials, people, technologies, and information necessary to meet those needs and wants; optimizing the goods-or service-producing network to fulfill customer requests; and utilizing the network to fulfill customer requests in a timely way. It consists of inbound logistics, conversion operations, and outbound logistics. Inbound logistics is the movement of products into a firm.

Unit 6

I. Fill in the blanks according to what you have learnt.

- | | | | |
|---------------|---------------|----------|-----------------|
| 1. Execution | 2. settlement | 3. order | 4. notification |
| 5. electronic | 6. invoice | 7. Bank | 8. repeated |

II. Translate the following sentences into Chinese.

1. 找到一个合适的贸易伙伴而且对相关条款进行商讨就像交易大楼中的讨价还价的买卖人。
2. 不同于传统交易的是 EDI 可以用于标准化或重复交易。
3. EDI 就是无纸张交易。
4. EDI 交易包括密码、价值及段篇的文本,如果可能的话。
5. EDI 的使用就是有很大潜力降低员工成本。

III. Translate the following sentences into English.

1. Internet is a vast new frontier of consumer-to business and business-to-business commerce.
2. Electronic commerce makes it possible to sell commodities in a cheap, efficient, easy and global way.
3. While this certainly opened the door and paved the way for Internet commerce, it still required that business be conducted through traditional methods.
4. The ability to order and pay for products over the Internet can revolutionize international trade.
5. Electronic commerce is global in nature, so the Internet cannot help but to dramatically increase international trade.

IV. Answer the following questions.

1. EDI is often summed up as Paperless Trading. More formally EDI is defined, by the International Data Exchange Association (IDEA), as: The transfer of structured data, by agreed message standards, from one computer system to another, by electronic means. This definition of EDI has four elements, a. Structured Data b. Agreed Message Standards c. From One Computer System To Another d. By Electronic Means.
2. It should save considerable time on the exchange of business transactions and has the potential for considerable savings in costs. The full advantage of EDI is only realized when business practices are restructured to make full use of the potential of EDI.

Unit 7

I. Fill in the blanks with the correct form of the words given below.

1. pressures
2. services
3. success
4. divided
5. Organizational
6. consumption
7. adding
8. categorized
9. comparisons
10. browse

II. Translate the following sentences into Chinese.

1. 为了帮助找到书籍,亚马逊不仅提供了主题目录,而且提供了关键词搜索引擎,像大多数的电子购物商场一样。
2. 在这种情况下,管理角度关注的是谁最终会更具竞争力?
3. 亚马逊的案例展示了电子零售商的竞争性结构。
4. 如果一个厂商的网址没有很高的可视性,只是建了个主页然后被动地等待消费者进入,这样对销售是没有很大帮助的。
5. 最初,电子营销的主要考虑包括有必要实施到以互联网为基础的营销方面的安全技术。

III. Translate the following sentences into English.

1. We can investigate the competition structure of the cyber book market by comparing the strength and weakness of Amazon with its competitors.
2. After gaining a reputation as the cyber-bookstore, Amazon expanded its offerings to music, video, gifts, and auction.

3. What can be the critical success factors for winning the market?
4. By using the Internet, manufacturers can directly contact customers without using intermediaries.
5. It is necessary for companies to heavily advertise their Web sites' address.

IV. Answer the following questions.

1. Amazon is the largest cyber-bookstore in the world, with 50 percent of the cyber book market share. It was opened in July 1995.

Amazon carries 23 categories of books that can be found by clicking "Browse books by subject" (visit Amazon's home page). To assist in finding books, Amazon provides not only a subject directory but also a keyword search engine, as most large electronic shopping malls do. In addition, Amazon provides information about bestsellers, related books for contextual selling, and critiques about many books in the "Hot This Week" corner.

After gaining a reputation as the cyber-bookstore, Amazon expanded its offerings to music, video, gifts, and auction.

The comments are based on everyone's own understanding.

2. We can understand the competitive structures of the electronic market from various angles. Electronic marketing can be classified as consumer-oriented (B2C) and business-oriented electronic marketing (B2B). Consumer-oriented electronic marketing is also growing offline, mainly using smart cards, although it is still experimental. There are many common features between consumer-oriented and business-oriented marketing. Under the seller-centered electronic mall architecture, there are only minor difference in dealing with individual consumers and businesses.

Unit 8

I. Fill in the blanks according to the text.

1. expands 2. international 3. quickly 4. example 5. Internet
6. cheaper 7. decreases 8. storing 9. cut 10. much

II. Translate the following sentences into Chinese.

1. 在高度竞争条件下,重点需放在具有高的投资回报和附加顾客价值的过程及信息系统。
2. 20 世纪 90 年代,供应链管理中没有其他什么领域像软件应用领域那样有如此大的转变。
3. 那些怀有错误竞争设想,进入信息系统和信息技术项目的公司,可能发现他们的方式并不具有竞争优势。
4. 通过促进“拉力”式的供应链管理,电子商务减少了企业的库存并降低了管理费用。
5. 电子商务提供柔性生产,使得交货较快,在供应商、生产商及零售商之间支持快速的无纸传输交易。

III. Translate the following sentences into English.

1. The trades-offs and choice related to information management, IS and IT are different under conditions of moderate versus hyper-competition.
2. Some companies usually emphasize the customer value side of the supply chain and focus on implementing system in 6-12 months.
3. Most large manufacturing companies are trying to leverage their supply chains on a global, regional and local basis simultaneously.
4. Their competitors are creating value with customers through rapid, focused and continuous improvements in supply-chain core processes and information flows.
5. When asked about the impact of these projects, managers usually say their companies will be more customer-responsive, more cost-effective and better able to share consistent and accurate information across functions.

IV. Answer the following questions.

1. In the moderate competitive market, investing in upstream projects (new financial systems, production planning or inventory management systems) may offer substantial benefits, including consistent information sharing and improved cross-functional cooperation. In hypercompetitive conditions, the focus needs to be on process and information systems with high return-on-investment and added customer value. The operational focus will shift to the demand side and emphasize customer interaction, account management, after-sales service and order processing.
2. The changes have occurred on two levels. First, in the last decade, package software offerings for manufacturing companies have evolved as a major growth market. Second, for most of the 1990s and earlier decades of predominantly mainframe-based computing, the dominant paradigm for implementing software was based on the “waterfall” approach, where a complex linear process was launched to specify client needs followed by the development of applications software over four-to-five years.

Unit 9

I. Fill in the blanks with the correct form of the words given below.

- | | | | | |
|-------------|-------------|-------------|--------------|------------|
| 1. match | 2. involved | 3. partners | 4. bartering | 5. submits |
| 6. accessed | 7. credit | 8. purchase | 9. specify | 10. target |

II. Translate the following sentences into Chinese.

1. 在互动营销中,一个消费者能够用鼠标点击一则广告了解信息,或是发送电邮提问。
2. 而且,通过使用 URL,目标用户能够被锁定,由于关键字的作用不必要的浏览者可以被过滤掉。
3. 聊天能力可以免费添加到商务网站中,通过让软件聊天卖主在他们的网站中主持你的会议。
4. 广告客户认识到他们必须调整营销计划来适应数量不断增长,持续增加网络在线时间而代替其他媒介的目标群。

5. 这些特点开始说服大型消费品公司将越来越多的广告费从传统媒体转向网络广告。

Ⅲ. Translate the following sentences into English.

1. The Internet has enabled consumers to interact directly with advertisers and advertisements.

2. Designers of banners pay a lot of attention to the size of the image because long downloading times may cause a viewer to become impatient and move on before the banner is fully displayed.

3. The major advantage of a splash page over any other advertising method is that one can create innovative multimedia effects or provide sufficient information for a delivery in one visit.

4. Search engines often provide space (spot) in their home page for any individual business to lease. The duration of the lease depends upon the contract agreement between the Web site host and the lessee.

5. Another way to advertise on the Internet is to purchase E-mail addresses and send the company information to those on the list.

Ⅳ. Answer the following questions.

1. They are banners, splash screen, spot leasing, universal resource locators, E-mail and chat rooms.

2. There are several reasons why companies advertise on the Internet.

a. Television viewers are migrating to the Internet.

b. Ads can reach very large numbers of potential buyers globally.

c. Online ads are sometimes cheaper in comparison to television, newspaper, or radio.

d. Web ads can efficiently use the convergence of text, audio, graphics, and animation.

e. The use of the Internet itself is growing very rapidly.

Unit 10

I. Fill in the blanks according to the text.

1. symmetric 2. asymmetric 3. short 4. throughput 5. ciphers;
6. keys 7. authentication 8. private 9. linguistic 10. interpretation

Ⅱ. Translate the following sentences into Chinese.

1. 在传统的加密过程中,秘密信息的发送者和接收者首先都必须共享一个私有密码来加密或解密信息。

2. 现在,任何一方都能够给其他方发送“公钥”使他们能够加密信息,但是只有私钥的持有者才能在收到信息后解密信息。

3. 解决这些问题的方法之一就是加密,加密就是把数据转换成密码,以便信息不被未授权的用户看到。

4. 证书权威机构是受信任的第三方机构,它可以证实身份,并且可以出具一份公认的,值得信任的文件来证实个人身份。

5. 智能卡就像信用卡一样,易携带,塑封皮下包含了一个完整的线路,线路里面密封着一个印着个人数据信息和个人密码的电子芯片。

III. Translate the following sentences into English.

1. At the system heart is a pair of digital keys, one public and one private, held by each party to a transaction.

2. Each user owns and uses their own “electronic wallet” to administer their rights and ensure security.

3. When an electronic message is received by a user or a system, the identity of the sender needs to be verified in order to determine if the sender is who he claims to be.

4. A message that has not been altered in any way, either intentionally or unintentionally, is said to have maintained its integrity.

5. When a message is sent electronically, the sender and receiver may desire that the message remain confidential, and thus not be read by any other party.

IV. Answer the following questions.

1. Regardless of the level of sophistication, all cryptography has four basic parts. The very first part is the plaintext which is the original message in human-readable form. After the plaintext message has been encrypted into unreadable form, it forms the second basic part of encryption-Ciphertext. Algorithm, which refers to the mathematical formula used to encrypt the plaintext into ciphertext and vice versa, is also an essential part of encryption. The last part but not the least part of cryptography is the key. It is used to encrypt and decrypt a message. Different keys produce different ciphertext when used with the same algorithm.

2. Different algorithms can be used to encrypt messages. For much of history, encryption algorithms were symmetrical, which means that the same key was used to both encrypt and decrypt a message. This means that the sender and receiver had to agree in advance on the key. Symmetrical key encryption is also called private key encryption.

Public key encryption, also known as asymmetrical encryption, utilizes a pair of keys—one public and one private. The public key is made available to anyone who wants to send an encrypted message to the holder of the private key. The only way to decrypt the message is with the private key.

Unlike symmetrical encryption, which possesses only a couple of algorithms for encrypting messages, public key has many. The main problem with all public key algorithms is their speed. Symmetrical algorithms are qualitatively faster than public key algorithms because they require shorter keys. A combination of a symmetrical and public key encryption known as a digital envelop is used in real-world applications.

Unit 11

I. Fill in the blanks according to the text.

1. challenges 2. Internet 3. abuses 4. transaction 5. increase

II. Translate the following sentences into Chinese.

1. 网络活动必须遵守其法律法规。

2. 电子商务是一个新生事物。它的存在必然涉及法律,道德,及其他公共政策等问题。这些问题仍在不断发展变化之中。

3. 由于复制和传播数字化的信息既简单又便宜,所以在网上进行知识产权保护非常困难。

4. 可悲的是,世界上的一些人把因特网当成进行犯罪,从事恐怖活动甚至发动战争的有效工具。

5. 另一个问题是当网络犯罪与因特网紧密相连时,执法人员执行法律是十分困难的。

III. Translate the following sentences into English.

1. The development and wide application of E-Commerce push the development of E-Commerce Law, which shows the rule-business law reflects business transaction regulations.

2. In the e-business environment, building a relationship with customers is critical and this cannot be achieved without hearing their suggestions needs and desires.

3. For example, a U.S. jury recently awarded significant damages against a Web site that had posted the names and addresses of certain controversial individuals.

4. E-business leaders should stay up-to-date on the relevant tax laws and make sure that tax effects are always considered before strategic or operational decisions are made.

5. E-procurement, or the acquisition and/or selling of materials and products via electronic means, may be one of the fastest and easiest ways to experience the benefits of e-business in action.

IV. Answer the following questions.

1. Privacy issue is becoming the most important issue for consumers. At the present time, it is illegal to impose new sales taxes on Internet business. Free speech. The Internet provides the largest opportunity for free speech that has ever existed. Consumer protection. Other legal issues. Several other EC legal issues exist, including topics such as validity of contracts, jurisdiction over trades, encryption policies, and Internet gambling. Intellectual property. Protecting intellectual property on the Web is very difficult since it is easy and inexpensive to copy and disseminate digitized information.

2. Businesses operating on the Web face two additional complicating factors as they try to comply with the law. First, the Web extends a company's reach beyond traditional boundaries. A business that uses the Web immediately becomes an international business. Thus, a company can become subject to many more laws more quickly than a traditional brick-and-mortar business based in one specific physical location. Second, the Web increases the speed and efficiency of business communications. Customers often have much more interactive and complex relationships with online merchants than they do with traditional merchants. Further, the Web creates a network of customers who often have

significant levels of interaction with each other. Web businesses that violate the law or breach ethical standards can face rapid and intense reactions from many customers and other stakeholders who become aware of the businesses' activities.

Unit 12

I . Fill in the blanks according to the text.

1. selling 2. promoting 3. marketing 4. Web
5. prospective 6. four 7. promotion 8. brand

II . Translate the following sentences into Chinese.

1. 市场架构中的价格因素就是消费者购买商品的价格。
2. 这个总体成本来源于顾客在交易中所得的价值。
3. 促销包括任何一种关于此商品的描述的言词。
4. 如何在合适的时间合适的地点销售一种合适的产品是自从商业开始之后就让商家头疼的问题。
5. 任何一个公司的经理都从两方面看待自己的商业,那就是产品和服务。

III . Translate the following sentences into English.

1. E-Commerce is able to provide abundant and new opportunities for those enterprises that can launch business activities by using e-commerce conveniently and broadly.
2. Enterprises can develop international market and having talk with international market by utilizing Internet.
3. New economy which is represented by Web site and e-commerce will make the economy globlized and netized.
4. Internet can cross nation, region, time and space, and thus break the national and regional barrier no matter it is visible or invisible.
5. E-commerce can not only strengthen the interdependent relationship, it also can make those suppliers furnish goods and service much easier and quicker.

IV . Answer the following questions.

In recent years, marketing experts have argued that companies should think of price in a broader sense, that is, the total of all financial costs that the customer pays(including transaction costs) to obtain the product. Think of price in a broader sense, the benefits that a customer derives from the product to yield an estimate of the customer value obtained in the transaction. The Web can create new opportunities for creative pricing and price negotiations through online auctions, reverse auctions, and group buying strategies. These Web-based opportunities are helping companies find new ways to create increased customer value.

A good first step in building a customer-based marketing strategy is to identify groups of customers who share common characteristic.

Unit 13

I. Fill in the blanks according to the text.

1. associated 2. highlights 3. shifting 4. substantially 5. transition
6. broader 7. fundamentally 8. prevailing 9. hierarchies 10. scarcity

II. Translate the following sentences into Chinese.

1. 信息经济在根本上取决于信息这个商业工具在商业中越来越突出的重要性。
2. 企业可能会被推向以网络为基础的组织结构,而不是建立在等级制度基础上的传统企业。
3. 主要的观点是信息经济的发展引发了人们对于能够改进和提高商业运行过程效率的新产品和服务的需求。
4. 强调信息经济不是网络的商业化发展,也不仅仅是某个技术的商业影响,这一点是很重要的。
5. 在一个知识和信息决定商业成功与否的年代里,信息经济应商务和经济需求而生。

III. Translate the following sentences into English.

1. How information resources are utilized by enterprises is becoming increasingly central to their competitiveness.
2. This has the potential to alter fundamentally all aspects of the prevailing business model.
3. The other notable feature of the enterprise in the information economy is how the resource base is expected to alter.
4. These changes also extend to logistical processes as information and associated technologies become ever more salient.
5. 90 per cent of businesses feeling that telecommunications will become ever more important in supporting their relationship with customers and suppliers.

IV. Answer the following questions.

1. What's the nature of the information economy?

The development of the information economy is closely associated with the process of economic transformation within modern economies; the information economy is not about total digitalization of the business environment, it is more about utilizing information products and services to improve wealth creation through enhancing enterprise competitiveness, highlighting the pragmatic attitude that many businesses take towards its development; the information economy is not a synonym for the commercial evolution of the Internet-it is about more than the commercial impact of a single technology.

2. What are the core trends of the information economy?

The evolution of the information economy creates a demand for new products and services to improve and increase the efficiency and effectiveness of commercial processes-a trend that is becoming fairly ubiquitous.

Unit 14

I. 完型填空答案

One of the challenges of posting new ideas on crowdfunding sites is there may be little or no intellectual property (IP) protection provided by the sites themselves. Once an idea is posted, it can be copied. As Slava Rubin, founder of IndieGoGo said: “We get asked that all the time, ‘How do you protect me from someone stealing my idea?’ We’re not liable for any of that stuff.” Inventor advocates, such as Simon Brown, founder of the UK-based United Innovation Association, counsel that ideas can be protected on crowdfunding sites through early filing of patent applications, use of copyright and trademark protection as well as a new form of idea protection supported by the World Intellectual Property Organization called Creative Barcode.

II. 英译汉答案

1. 众筹是众多人,一般通过互联网,为一个项目或一项投资而集资的活动。
2. 除了严格意义上的财务收益,众筹活动还为生产商提供了诸多好处。
3. 在众筹网站发布新思想的一个挑战就是网站本身可能有很少或没有知识产权(IP)保护措施。
4. 各种众筹平台的出现使得普通网民能够不必需要大量的钱就能支持具体的慈善项目。

III. 汉译英答案

A possible early precursor of the crowdfunding business model could be the concept of collective fundraising.

Real estate crowdfunding is the online pooling of capital from investors to fund mortgages secured by real estate.

3. Sometimes it proves easier to raise the money for a project than to make the project a success.

Charity crowdfunding is the collective effort of individuals to help charitable causes.

Unit 15

I. Fill in the blanks according to the text.

1. independent
2. applies
3. to evaluate
4. approves
5. fair
6. defrauding
7. trusted
8. drawback
9. veracity
10. via

II. Translate the following sentences into Chinese.

1. 极大地决定着电子商务成功的两个因素是人们对于网上交易的信任和交易的安全程度。
2. 诸如亚马逊这样的公司极大地推进了软件的发展,这些软件的网上订购变得易如反掌。
3. 这方面的任何瓶颈是商家失去信任的一个重要因素。
4. 代理商的根本作用就是充当几个商家和全世界广大顾客的中间人。

5. 由于在何时何地都可以用到电子商务,所以在树立和维持其信誉方面还存在着其他的障碍。

Ⅲ. Translate the following sentences into English.

1. There are several tools available to enhance security on the Internet.
2. This is not a drawback as long as the order tracking information is linked to the order history.
3. In e-business, the customer is most likely separated by distance from the merchant and at the same time has access to the merchant's Web site around the clock.
4. So they use the financial institution's intermediary role in guaranteeing payment to the merchant and at the same time assuring customers that their satisfaction is paramount.
5. Since the e-businesses are accessible from anywhere at any time, there are additional impediments in building and maintaining trust.

Ⅳ. Answer the following questions.

1. In the world of online commerce the factors that significantly contribute for enhancing transaction trust are easy access to description of products and services, ease of placing orders, order confirmation, order tracking and post-sales service.
2. The intermediary role involves conflict resolution and customer satisfaction. Many online businesses are unknown to customers. Yet, they have an interest in doing business with the online company because the product or service has a beneficial aspect to the customer. Their primary concern is the lack of knowledge about the business. On the other hand, they have trust in large financial institutions. So they use the financial institution's intermediary role in guaranteeing payment to the merchant and at the same time assuring customers that their satisfaction is paramount. The merchant is satisfied that the customer has paid for the order. Customers are satisfied that if the ordered item did not meet their expectations then they have a reliable intermediary to mediate.

Unit 16

I. Fill in the blanks with the proper form of the given words.

1. to automate
2. standardize
3. suppliers
4. associated
5. availability
6. tracking
7. purchased
8. Enables
9. reduction
10. simplified

Ⅱ. Translate the following sentences into Chinese.

1. 对大多数公司来说,规划、设计及实施严谨的电子商务战略的能力是决定其成败的重要因素。
2. 企业积极地实施电子商务方案有诸多的原因。
3. 然而,企业使用电子商务不仅仅是从事销售工作。
4. 电子商务方案所带来的一些是有形的,可以衡量的;一些是无形的,无法衡量的。
5. 这些企业可以设立目标来增强其品牌意识。

Ⅲ. Translate the following sentences into English.

1. People's attitudes toward to Internet vary from people to people.

2. This unit will focus on how to plan electronic commerce initiatives.
3. The commodities in this web site range in price from a few dollars to hundreds of dollars.
4. No matter how complex the problems are, we will solve them in a month.
5. The students are striving to improve their knowledge of electronic commerce.

IV. Answer the following questions briefly.

1. The ability of companies to plan, design, and implement cohesive electronic commerce strategies will make the difference between success and failure for the majority of them. The tremendous leverage that firms can gain by being the first to do business a new way on the Web has caught the attention of top executives in many industries.

2. A successful business plan for an electronic commerce initiative should include activities that identify the initiative's specific objectives and link those objectives to business strategies.

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